Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 ***Collected:*** 6/6/2011 11:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	0.0168	U	0.0168	MDL	0.105	PQL	mg/Kg	UJ	Q

Sample ID: SL-022-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 11:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0978	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5DN-SB-4.0-5.0 ***Collected:*** 6/6/2011 11:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.272		0.0665	MDL	0.222	PQL	mg/Kg	J	Q
BERYLLIUM	1.02		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	34.1		0.133	MDL	0.443	PQL	mg/Kg	J	A
LEAD	10.7		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
SILVER	0.0501	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	65.2		0.0244	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-053-SA5DN-SB-11.5-12.5 ***Collected:*** 6/6/2011 4:00:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0697	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-11.5-12.5 ***Collected:*** 6/6/2011 4:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.735		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.0887	J	0.0442	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	24.7		0.133	MDL	0.442	PQL	mg/Kg	J	A
LEAD	9.71		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
SILVER	0.0286	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	47.1		0.0243	MDL	0.111	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **6020** ***Matrix:*** **SO**

Sample ID: **SL-053-SA5DN-SB-4.0-5.0** ***Collected:*** **6/6/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.259		0.0703	MDL	0.234	PQL	mg/Kg	J	Q
BERYLLIUM	0.817		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.0861	J	0.0468	MDL	0.117	PQL	mg/Kg	J	Z
CHROMIUM	30.8		0.141	MDL	0.468	PQL	mg/Kg	J	A
LEAD	10.0		0.0122	MDL	0.234	PQL	mg/Kg	J	Q, E
SILVER	0.0428	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	53.4		0.0258	MDL	0.117	PQL	mg/Kg	J	A

Sample ID: **SL-079-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 12:05:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0560	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: **SL-079-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.871		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0801	J	0.0450	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	21.1		0.135	MDL	0.450	PQL	mg/Kg	J	A
LEAD	8.14		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
SILVER	0.0579	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	44.9		0.0248	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: **SL-079-SA8N-SB-9.0-10.0** ***Collected:*** **6/6/2011 11:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0621	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: **SL-079-SA8N-SB-9.0-10.0** ***Collected:*** **6/6/2011 11:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0690	MDL	0.230	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.673		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	21.7		0.138	MDL	0.460	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.41		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, E
SILVER	0.0280	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	42.5		0.0253	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0498	J	0.0466	MDL	0.466	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.209	J	0.0700	MDL	0.233	PQL	mg/Kg	J	Z, Q
BERYLLIUM	0.835		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.106	J	0.0466	MDL	0.117	PQL	mg/Kg	J	Z
CHROMIUM	32.9		0.140	MDL	0.466	PQL	mg/Kg	J	A
LEAD	9.15		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, E
SILVER	0.0337	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	63.7		0.0257	MDL	0.117	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.58	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

Method: **7199** ***Matrix:*** **SO**

Sample ID: **SL-053-SA5DN-SB-4.0-5.0** ***Collected:*** **6/6/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-079-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-079-SA8N-SB-9.0-10.0** ***Collected:*** **6/6/2011 11:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	1.0	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 4:15:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: **METALS**

Method: **7471A** ***Matrix:*** **SO**

Sample ID: **SL-022-SA5DN-SB-4.0-5.0** ***Collected:*** **6/6/2011 11:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0106	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: **SL-053-SA5DN-SB-4.0-5.0** ***Collected:*** **6/6/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0035	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: **SL-133-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 4:15:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0159	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	53.1		18.0	MDL	36.1	PQL	ng/Kg	U	B

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	37.9	J	19.1	MDL	38.3	PQL	ng/Kg	U	B

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	52.8		19.6	MDL	39.1	PQL	ng/Kg	U	B

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	61.8		19.6	MDL	39.3	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.78	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.85	J	0.46	MDL	1.4	PQL	mg/Kg	U	B
EFH (C30-C40)	2.0		0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.7		0.47	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.2		0.47	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.80	J	0.47	MDL	1.4	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	E

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	E

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	E

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	1.9	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-022-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 11:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory:** LL

EDD Filename: PrepDE174_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-053-SA5DN-SB-11.5-12.5 *Collected:* 6/6/2011 4:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-053-SA5DN-SB-4.0-5.0 *Collected:* 6/6/2011 3:50:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-079-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 12:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-079-SA8N-SB-9.0-10.0 *Collected:* 6/6/2011 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-133-SA8N-SB-4.0-5.0 *Collected:* 6/6/2011 4:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-022-SA5DN-SB-15.0-16.0 *Collected:* 6/6/2011 11:50:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.8	MDL	8.1	PQL	ug/Kg	U	B
CHLOROFORM	0.17	J	0.12	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.1	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-022-SA5DN-SB-4.0-5.0** ***Collected:*** **6/6/2011 11:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.17	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-053-SA5DN-SB-4.0-5.0** ***Collected:*** **6/6/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.9		8.0	MDL	9.6	PQL	ug/Kg	U	B
CHLOROFORM	0.19	J	0.14	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.3	J	0.29	MDL	4.8	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.1	MDL	4.8	PQL	ug/Kg	J	Z

Sample ID: **SL-079-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 12:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.86**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.0		6.6	MDL	7.9	PQL	ug/Kg	U	B
CHLOROFORM	0.16	J	0.12	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.99	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.22	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: **SL-079-SA8N-SB-9.0-10.0** ***Collected:*** **6/6/2011 11:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.92**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.9		7.3	MDL	8.7	PQL	ug/Kg	U	B
CHLOROFORM	0.19	J	0.13	MDL	4.3	PQL	ug/Kg	J	Z
TOLUENE	0.40	J	0.09	MDL	4.3	PQL	ug/Kg	J	Z

Sample ID: **SL-133-SA8N-SB-4.0-5.0** ***Collected:*** **6/6/2011 4:15:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.88**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.5		6.9	MDL	8.3	PQL	ug/Kg	U	B
CHLOROFORM	0.16	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE174

Method Blank Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB16B261008	6/28/2011 10:08:00 AM	N-NITROSODIMETHYLAMINE	18.9 ng/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-15.0-16.0(RES)	N-NITROSODIMETHYLAMINE	53.1 ng/Kg	53.1U ng/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	37.9 ng/Kg	38.3U ng/Kg
SL-079-SA8N-SB-9.0-10.0(RES)	N-NITROSODIMETHYLAMINE	52.8 ng/Kg	52.8U ng/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	61.8 ng/Kg	61.8U ng/Kg

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15808BB220530	6/8/2011 5:30:00 AM	PHOSPHORUS TIN	1.09 mg/Kg 1.28 mg/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-15.0-16.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-022-SA5DN-SB-4.0-5.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-053-SA5DN-SB-11.5-12.5(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-053-SA5DN-SB-4.0-5.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-079-SA8N-SB-9.0-10.0(RES)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P15826DB220423A	6/11/2011 4:23:00 AM	COPPER LEAD	0.152 mg/Kg 0.0660 mg/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P61613AB321415A	6/11/2011 2:15:00 PM	EFH (C21-C30) EFH (C30-C40)	0.43 mg/Kg 0.90 mg/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.78 mg/Kg	1.4U mg/Kg
SL-079-SA8N-SB-4.0-5.0(REA2)	EFH (C21-C30)	0.85 mg/Kg	1.4U mg/Kg
SL-079-SA8N-SB-4.0-5.0(REA2)	EFH (C30-C40)	2.0 mg/Kg	2.0U mg/Kg
SL-079-SA8N-SB-9.0-10.0(REA2)	EFH (C21-C30)	1.7 mg/Kg	1.7U mg/Kg
SL-079-SA8N-SB-9.0-10.0(REA2)	EFH (C30-C40)	4.2 mg/Kg	4.2U mg/Kg
SL-133-SA8N-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.80 mg/Kg	1.4U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB78B211215A	6/8/2011 12:15:00 PM	ACETONE METHYLENE CHLORIDE	8.7 ug/Kg 1.0 ug/Kg	SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA5DN-SB-15.0-16.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-022-SA5DN-SB-15.0-16.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.0U ug/Kg
SL-022-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.1U ug/Kg
SL-053-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.9 ug/Kg	9.9U ug/Kg
SL-053-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.8U ug/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	ACETONE	8.0 ug/Kg	8.0U ug/Kg
SL-079-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.99 ug/Kg	4.0U ug/Kg
SL-079-SA8N-SB-9.0-10.0(RES)	ACETONE	9.9 ug/Kg	9.9U ug/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	ACETONE	8.5 ug/Kg	8.5U ug/Kg
SL-133-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.1U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 300.0**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-022-SA5DN-SB-4.0-5.0MS (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	FLUORIDE	33	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-022-SA5DN-SB-4.0-5.0DUP (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	FLUORIDE	22	20.00	J (all detects) UJ (all non-detects)
	Nitrate-NO3	21	20.00	NO3, No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: PrepDE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11611AQ241711A P11611AY241652A (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	Aroclor 5442	148	-	36.00-106.00	38 (30.00)	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P15826DQ220426A (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	ANTIMONY	132	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0LFLCSQ260127 (SL-022-SA5DN-SB-15.0-16.0 SL-022-SA5DN-SB-4.0-5.0 SL-053-SA5DN-SB-11.5-12.5 SL-053-SA5DN-SB-4.0-5.0 SL-079-SA8N-SB-4.0-5.0 SL-079-SA8N-SB-9.0-10.0 SL-133-SA8N-SB-4.0-5.0)	1,2-DICHLOROBENZENE	77	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	37.9	38.3	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	TIN Zirconium	J J	2.94 1.31	10.8 5.41	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-022-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	3.09 2.53	11.4 5.71	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-11.5-12.5	TIN Zirconium	J J	2.95 1.80	11.1 5.53	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.94 1.98	11.7 5.85	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	TIN Zirconium	J J	3.00 2.88	11.4 5.68	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA8N-SB-9.0-10.0	TIN Zirconium	J J	3.06 2.62	11.4 5.70	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	TIN Zirconium	J J	3.09 4.96	11.3 5.66	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	ANTIMONY SILVER	J J	0.0885 0.0549	0.210 0.105	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-022-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0978 0.0501	0.443 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-11.5-12.5	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.160 0.0887 0.0697 0.0286	0.221 0.111 0.442 0.111	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	CADMIUM SILVER	J J	0.0861 0.0428	0.117 0.117	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	ANTIMONY CADMIUM SELENIUM SILVER	J J J J	0.155 0.0801 0.0560 0.0579	0.225 0.113 0.450 0.113	PQL PQL PQL PQL	mg/Kg mg/Kg mg/Kg mg/Kg	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SB-9.0-10.0	ANTIMONY	J	0.135	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0621	0.460	PQL	mg/Kg	
	SILVER	J	0.0280	0.115	PQL	mg/Kg	
SL-133-SA8N-SB-4.0-5.0	ANTIMONY	J	0.209	0.233	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.106	0.117	PQL	mg/Kg	
	SELENIUM	J	0.0498	0.466	PQL	mg/Kg	
	SILVER	J	0.0337	0.117	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-022-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	1.0	1.2	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-4.0-5.0	MERCURY	J	0.0106	0.111	PQL	mg/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	MERCURY	J	0.0035	0.109	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	MERCURY	J	0.0159	0.111	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.78	1.4	PQL	mg/Kg	J (all detects)
SL-079-SA8N-SB-4.0-5.0	EFH (C21-C30)	J	0.85	1.4	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-4.0-5.0	EFH (C30-C40)	J	0.80	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE174 **Laboratory: LL**

EDD Filename: DE174_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SB-4.0-5.0	AROCLOR 1248	J	1.9	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5DN-SB-15.0-16.0	CHLOROFORM	J	0.17	4.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.1	4.0	PQL	ug/Kg	
	TOLUENE	J	0.15	4.0	PQL	ug/Kg	
SL-022-SA5DN-SB-4.0-5.0	CHLOROFORM	J	0.17	4.1	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.2	4.1	PQL	ug/Kg	
SL-053-SA5DN-SB-4.0-5.0	CHLOROFORM	J	0.19	4.8	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.3	4.8	PQL	ug/Kg	
	TOLUENE	J	0.15	4.8	PQL	ug/Kg	
SL-079-SA8N-SB-4.0-5.0	CHLOROFORM	J	0.16	4.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.99	4.0	PQL	ug/Kg	
	TOLUENE	J	0.22	4.0	PQL	ug/Kg	
SL-079-SA8N-SB-9.0-10.0	CHLOROFORM	J	0.19	4.3	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.40	4.3	PQL	ug/Kg	
SL-133-SA8N-SB-4.0-5.0	CHLOROFORM	J	0.16	4.1	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.2	4.1	PQL	ug/Kg	
	TOLUENE	J	0.17	4.1	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-053-SA5DN-SB-11.5-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-053-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	390	PQL	ug/Kg	J (all detects)

LDC #: 26277E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/14

SDG #: DE174 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: MM

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	Na, Fe
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	3 DE168
VII.	Duplicate Sample Analysis	SW	
VIII.	Laboratory Control Samples (LCS)	NA	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, V.
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-022-SA5DN-SB-4.0-5.0	11		21		31	
2	SL-022-SA5DN-SB-15.0-16.0	12		22		32	
3	SL-053-SA5DN-SB-4.0-5.0	13		23		33	
4	SL-053-SA5DN-SB-11.5-12.5	14		24		34	
5	SL-079-SA8N-SB-4.0-5.0	15		25		35	
6	SL-079-SA8N-SB-9.0-10.0	16		26		36	
7	SL-133-SA8N-SB-4.0-5.0	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE175

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3050B	6010B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3050B	6020	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3060A	7199	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3546	1625C	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8015B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8015M	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8082	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8270C	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	3550B	8270C SIM	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	5035	8015M	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	5035	8260B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	5035	8260B SIM	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	8330	8330A	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	314.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	7471A	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	8015B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	8015M	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	8315A	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0	6309746	N	METHOD	9012B	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0DUP	P309746D271425B	DUP	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0DUP	P309746D271635B	DUP	METHOD	314.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0MS	P309746R271439B	MS	METHOD	300.0	III
06-Jun-2011	SL-133-SA8N-SB-7.0-8.0MS	P309746R271658B	MS	METHOD	314.0	III
07-Jun-2011	TB-060711	6309747	TB	5030B	8015M	III
07-Jun-2011	TB-060711	6309747	TB	5030B	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	TB-060711	6309747	TB	5030B	8260B SIM	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3050B	6010B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3050B	6020	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3060A	7199	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3546	1625C	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8015B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8015M	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8082	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8270C	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	3550B	8270C SIM	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	5035	8015M	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	5035	8260B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	5035	8260B SIM	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	8330	8330A	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	300.0	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	314.0	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	7471A	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	8015B	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	8015M	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	8315A	III
07-Jun-2011	SL-071-SA8N-SB-2.0-3.0	6309743	N	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3546	1625C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8082	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8270C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	3550B	8270C SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	5035	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	5035	8260B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	5035	8260B SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	8330	8330A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	8315A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0	6309733	N	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3546	1625C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8082	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8270C	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	3550B	8270C SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	5035	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	5035	8260B SIM	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	8330	8330A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	8315A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0MS	6309734	MS	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-4.0-5.0DU	6309736	DUP	METHOD	9012B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3050B	6010B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3050B	6020	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3060A	7199	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3546	1625C	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8015B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8015M	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8082	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8270C	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	3550B	8270C SIM	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	5035	8015M	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	5035	8260B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	5035	8260B SIM	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	8330	8330A	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	300.0	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	314.0	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	7471A	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	8015B	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	8015M	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	8315A	III
07-Jun-2011	DUP13-SA5DN-QC-060711	6309742	FD	METHOD	9012B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3050B	6010B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3050B	6020	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3060A	7199	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3546	1625C	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8082	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8270C	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	3550B	8270C SIM	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	5035	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	5035	8260B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	5035	8260B SIM	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	8330	8330A	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	300.0	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	314.0	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	6850	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	7471A	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	8015B	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	8015M	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	8315A	III
07-Jun-2011	SL-024-SA5DN-SB-19.0-20.0	6309737	N	METHOD	9012B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3050B	6010B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3050B	6020	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3060A	7199	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3546	1625C	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8082	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8270C	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	3550B	8270C SIM	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	5035	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	5035	8260B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	5035	8260B SIM	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	8330	8330A	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	300.0	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	314.0	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	7471A	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	8315A	III
07-Jun-2011	SL-026-SA5DN-SB-4.0-5.0	6309738	N	METHOD	9012B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3050B	6010B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3050B	6020	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3060A	7199	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3546	1625C	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8082	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8270C	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	3550B	8270C SIM	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	5035	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	5035	8260B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	5035	8260B SIM	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	8330	8330A	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	300.0	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	314.0	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	7471A	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	8015B	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	8015M	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	8315A	III
07-Jun-2011	SL-026-SA5DN-SB-17.0-18.0	6309739	N	METHOD	9012B	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	3510C	8015B	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	3510C	8015M	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	3520C	1625C	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	5030B	8015M	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	8330	8330A	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	Gen Prep	300.0	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	Gen Prep	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	Gen Prep	8015M	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	METHOD	8315A	III
07-Jun-2011	EB15-SA5DN-SB-060711	6309748	EB	METHOD	9012B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3050B	6010B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3050B	6020	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3060A	7199	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3546	1625C	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8015B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8015M	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8082	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8270C	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	3550B	8270C SIM	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	5035	8015M	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	5035	8260B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	5035	8260B SIM	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	8330	8330A	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	300.0	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	314.0	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	7471A	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	8015B	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	8015M	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	8315A	III
07-Jun-2011	SL-122-SA8N-SB-2.0-3.0	6309744	N	METHOD	9012B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3050B	6010B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3050B	6020	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3546	1625C	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8082	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8270C	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	3550B	8270C SIM	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	5035	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	5035	8260B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	5035	8260B SIM	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	8330	8330A	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	300.0	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	314.0	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	6850	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	7471A	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	8315A	III
07-Jun-2011	SL-036-SA5DN-SB-4.0-5.0	6309740	N	METHOD	9012B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3050B	6010B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3050B	6020	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3060A	7199	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3546	1625C	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8082	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8270C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	3550B	8270C SIM	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	5035	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	5035	8260B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	5035	8260B SIM	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	8330	8330A	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	300.0	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	314.0	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	7471A	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	8015B	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	8015M	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	8315A	III
07-Jun-2011	SL-036-SA5DN-SB-9.0-10.0	6309741	N	METHOD	9012B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3050B	6010B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3050B	6020	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3060A	7199	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3546	1625C	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8015B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8015M	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8082	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8270C	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	3550B	8270C SIM	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	5035	8015M	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	5035	8260B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	5035	8260B SIM	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	8330	8330A	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	300.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	314.0	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	7471A	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	8015B	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	8015M	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	8315A	III
07-Jun-2011	SL-140-SA8N-SB-3.0-4.0	6309745	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	17.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	15.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.5		0.96	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	13.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.2	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.86	U	0.86	MDL	1.1	PQL	mg/Kg	UJ	Q
Nitrate-NO3	1.2	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.4	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	8480		6.88	MDL	22.4	PQL	mg/Kg	J	E, E
MANGANESE	567		0.0875	MDL	0.561	PQL	mg/Kg	J	E, E
POTASSIUM	2930		20.2	MDL	56.1	PQL	mg/Kg	J	Q
TIN	2.80	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.86	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	16200		6.68	MDL	21.8	PQL	mg/Kg	J	E, E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	135		0.0851	MDL	0.545	PQL	mg/Kg	J	E, E
POTASSIUM	2520		19.6	MDL	54.5	PQL	mg/Kg	J	Q
TIN	2.30	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.69	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 9:10:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	13800		6.84	MDL	22.3	PQL	mg/Kg	J	E, E
MANGANESE	365		0.0871	MDL	0.558	PQL	mg/Kg	J	E, E
POTASSIUM	3130		20.1	MDL	55.8	PQL	mg/Kg	J	Q
TIN	2.60	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.58	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-17.0-18.0 ***Collected:*** 6/7/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3540		6.55	MDL	21.4	PQL	mg/Kg	J	E, E
MANGANESE	615		0.0834	MDL	0.535	PQL	mg/Kg	J	E, E
POTASSIUM	2080		19.2	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.75	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.26	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6520		7.27	MDL	23.7	PQL	mg/Kg	J	E, E
MANGANESE	491		0.0925	MDL	0.593	PQL	mg/Kg	J	E, E
POTASSIUM	3920		21.3	MDL	59.3	PQL	mg/Kg	J	Q
TIN	2.75	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	2.93	J	0.996	MDL	5.93	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	19500		7.01	MDL	22.9	PQL	mg/Kg	J	E, E
MANGANESE	364		0.0892	MDL	0.572	PQL	mg/Kg	J	E, E
POTASSIUM	2900		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	2.56	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.20	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	19600		6.94	MDL	22.6	PQL	mg/Kg	J	E, E
MANGANESE	220		0.0883	MDL	0.566	PQL	mg/Kg	J	E, E
POTASSIUM	3090		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.70	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.62	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1420		6.55	MDL	21.4	PQL	mg/Kg	J	E, E
MANGANESE	267		0.0834	MDL	0.535	PQL	mg/Kg	J	E, E
POTASSIUM	3050		19.2	MDL	53.5	PQL	mg/Kg	J	Q
SODIUM	69.6	J	39.9	MDL	107	PQL	mg/Kg	J	Z
TIN	2.53	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2890		6.34	MDL	20.7	PQL	mg/Kg	J	E, E
MANGANESE	298		0.0807	MDL	0.518	PQL	mg/Kg	J	E, E
POTASSIUM	3520		18.6	MDL	51.8	PQL	mg/Kg	J	Q
SODIUM	61.0	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	2.41	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.16	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6010B **Matrix:** SO

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	5510		6.93	MDL	22.6	PQL	mg/Kg	J	E, E
MANGANESE	254		0.0882	MDL	0.565	PQL	mg/Kg	J	E, E
POTASSIUM	1960		20.4	MDL	56.5	PQL	mg/Kg	J	Q
TIN	2.87	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.76	J	0.950	MDL	5.65	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2690		6.69	MDL	21.8	PQL	mg/Kg	J	E, E
MANGANESE	275		0.0851	MDL	0.546	PQL	mg/Kg	J	E, E
POTASSIUM	2680		19.6	MDL	54.6	PQL	mg/Kg	J	Q
SODIUM	75.3	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	2.42	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.19	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0730	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.333		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.271		0.0667	MDL	0.222	PQL	mg/Kg	J	Q
ARSENIC	7.52		0.0889	MDL	0.444	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.931		0.0178	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 ***Collected:*** 6/7/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.344		0.0444	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	32.9		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	12.6		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	17.7		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
LEAD	13.2		0.0116	MDL	0.222	PQL	mg/Kg	J	Q
NICKEL	28.5		0.111	MDL	0.444	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0599	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	57.6		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0758	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.948		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-19.0-20.0 ***Collected:*** 6/7/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.252		0.0654	MDL	0.218	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0872	MDL	0.436	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.847		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.368		0.0436	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.6		0.131	MDL	0.436	PQL	mg/Kg	J	Q, A
COBALT	29.0		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	16.3		0.0720	MDL	0.436	PQL	mg/Kg	J	Q
LEAD	14.1		0.0113	MDL	0.218	PQL	mg/Kg	J	Q
NICKEL	35.8		0.109	MDL	0.436	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0212	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.449		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	62.9		0.0240	MDL	0.109	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.361		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.255		0.0677	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	7.61		0.0902	MDL	0.451	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.987		0.0180	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.429		0.0451	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	34.4		0.135	MDL	0.451	PQL	mg/Kg	J	Q, A
COBALT	16.7		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	19.5		0.0744	MDL	0.451	PQL	mg/Kg	J	Q
LEAD	13.5		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	35.0		0.113	MDL	0.451	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0547	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.424		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0248	MDL	0.113	PQL	mg/Kg	J	E, A

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.288		0.0419	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0577	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5DN-SB-17.0-18.0 ***Collected:*** 6/7/2011 11:45:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.411		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 ***Collected:*** 6/7/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.110	J	0.0629	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	8.49		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.700		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	19.2		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	10.3		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	11.1		0.0692	MDL	0.419	PQL	mg/Kg	J	Q
LEAD	8.35		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
NICKEL	23.1		0.105	MDL	0.419	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0167	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.323		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	41.6		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.199	J	0.0470	MDL	0.470	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.524		0.0587	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.229	J	0.0704	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	6.42		0.0939	MDL	0.470	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.987		0.0188	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.333		0.0470	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	30.6		0.141	MDL	0.470	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 11:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	10.7		0.0235	MDL	0.117	PQL	mg/Kg	J	Q, E
COPPER	16.3		0.0775	MDL	0.470	PQL	mg/Kg	J	Q
LEAD	11.5		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
NICKEL	24.5		0.117	MDL	0.470	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0595	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.430		0.0352	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	48.2		0.0258	MDL	0.117	PQL	mg/Kg	J	E, A

Sample ID: SL-036-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 2:35:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0464	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 2:35:00 PM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.246		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SB-4.0-5.0 ***Collected:*** 6/7/2011 2:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.185	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	5.64		0.0906	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.21		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.255		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	27.5		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	7.89		0.0227	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	12.2		0.0747	MDL	0.453	PQL	mg/Kg	J	Q
LEAD	10.7		0.0118	MDL	0.227	PQL	mg/Kg	J	Q
NICKEL	21.6		0.113	MDL	0.453	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0368	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.345		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	43.6		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.336		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.270		0.0679	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	6.92		0.0906	MDL	0.453	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.959		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.128		0.0453	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	32.3		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	8.54		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E
COPPER	15.9		0.0747	MDL	0.453	PQL	mg/Kg	J	Q
LEAD	8.54		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	22.2		0.113	MDL	0.453	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0712	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.362		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	50.7		0.0249	MDL	0.113	PQL	mg/Kg	J	E, A

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.962		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.135	J	0.0629	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	6.79		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.786		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.168		0.0419	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	19.6		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	7.01		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	8.79		0.0692	MDL	0.419	PQL	mg/Kg	J	Q
LEAD	9.46		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
NICKEL	14.4		0.105	MDL	0.419	PQL	mg/Kg	J	Q, Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0615	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0231	MDL	0.105	PQL	mg/Kg	J	E, A

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.159	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.426		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0967	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	6.03		0.0844	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.655		0.0169	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.191		0.0422	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	18.9		0.127	MDL	0.422	PQL	mg/Kg	J	Q, A
COBALT	7.05		0.0211	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	10.4		0.0697	MDL	0.422	PQL	mg/Kg	J	Q
LEAD	9.15		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	15.3		0.106	MDL	0.422	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0650	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.336		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	37.6		0.0232	MDL	0.106	PQL	mg/Kg	J	E, A

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0507	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.238		0.0560	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.198	J	0.0672	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	7.56		0.0896	MDL	0.448	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.873		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.0793	J	0.0448	MDL	0.112	PQL	mg/Kg	J	Z, Q
CHROMIUM	21.6		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	6.64		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	10.6		0.0739	MDL	0.448	PQL	mg/Kg	J	Q
LEAD	10.0		0.0116	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	15.4		0.112	MDL	0.448	PQL	mg/Kg	J	Q, Q, E
SILVER	0.130		0.0134	MDL	0.112	PQL	mg/Kg	J	Q
THALLIUM	0.346		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	45.9		0.0246	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.295	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.803		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.146	J	0.0655	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	6.96		0.0873	MDL	0.437	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.669		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.133		0.0437	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.1		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	7.26		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	7.98		0.0720	MDL	0.437	PQL	mg/Kg	J	Q
LEAD	7.61		0.0114	MDL	0.218	PQL	mg/Kg	J	Q
NICKEL	14.8		0.109	MDL	0.437	PQL	mg/Kg	J	Q, Q, E
SILVER	0.0370	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.328		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	42.8		0.0240	MDL	0.109	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	U	0.23	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.41	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7471A **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0033	U	0.0033	MDL	0.114	PQL	mg/Kg	UJ	FD

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0048	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0278	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0044	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0117	J	0.0031	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0070	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C Matrix: AQ

Sample ID: EB15-SA5DN-SB-060711 *Collected:* 6/7/2011 1:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	1.71		0.526	MDL	1.05	PQL	ng/L	UJ	B, S

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	65.1		19.0	MDL	38.0	PQL	ng/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	18.9	U	18.9	MDL	37.8	PQL	ng/Kg	UJ	FD

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.1	J	18.1	MDL	36.2	PQL	ng/Kg	J	Z

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	20.4	J	19.8	MDL	39.5	PQL	ng/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	29.3	J	19.4	MDL	38.9	PQL	ng/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	23.9	J	19.1	MDL	38.2	PQL	ng/Kg	J	Z

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	33.0	J	17.8	MDL	35.5	PQL	ng/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	26.6	J	17.7	MDL	35.3	PQL	ng/Kg	J	Z

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	24.7	J	18.6	MDL	37.2	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA
Method: 1625C **Matrix:** SO

Method Category: SVOA
Method: 8015M **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.0	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.7	U	5.7	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.68	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.2	J	0.95	MDL	2.9	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.51	J	0.47	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.50	J	0.46	MDL	1.4	PQL	mg/Kg	U	B
EFH (C30-C40)	0.85	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.51	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.54	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.87	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.73	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.54	J	0.47	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	1.4	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q, L
1,3-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2,4,6-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	R	Q
2,4-DINITROTOLUENE	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	570	PQL	ug/Kg	R	Q
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
4-CHLORO-3-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
4-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
DIBENZOFURAN	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
HEXACHLOROBUTADIENE	76	U	76	MDL	190	PQL	ug/Kg	UJ	Q
HEXACHLOROETHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
ISOPHORONE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-036-SA5DN-SB-9.0-10.0 *Collected:* 6/7/2011 2:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-071-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 9:05:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	Q
Dimethylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	Q

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.74	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-122-SA8N-SB-2.0-3.0 *Collected:* 6/7/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.90	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA8N-SB-7.0-8.0 *Collected:* 6/6/2011 5:15:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.42	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.82	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: PrepDE175_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-140-SA8N-SB-3.0-4.0 *Collected:* 6/7/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.76	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.53	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.87	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** AQ

Sample ID: EB15-SA5DN-SB-060711 *Collected:* 6/7/2011 1:00:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	230	J	200	MDL	1000	PQL	ug/L	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP13-SA5DN-QC-060711 *Collected:* 6/7/2011 9:20:00 AM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.0		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.4	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.16	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-024-SA5DN-SB-19.0-20.0 *Collected:* 6/7/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.1		6.2	MDL	7.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-024-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 9:10:00 AM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		6.7	MDL	8.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.20	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5DN-SB-17.0-18.0 *Collected:* 6/7/2011 11:45:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 11:35:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-036-SA5DN-SB-4.0-5.0 *Collected:* 6/7/2011 2:35:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.5		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.1	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory:** LL

EDD Filename: PrepDE175_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-036-SA5DN-SB-9.0-10.0 ***Collected:*** 6/7/2011 2:45:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.4		7.2	MDL	8.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-071-SA8N-SB-2.0-3.0 ***Collected:*** 6/7/2011 9:05:00 AM ***Analysis Type:*** RES ***Dilution:*** 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	12		7.1	MDL	8.5	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-122-SA8N-SB-2.0-3.0 ***Collected:*** 6/7/2011 2:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.3		6.9	MDL	8.2	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.24	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-133-SA8N-SB-7.0-8.0 ***Collected:*** 6/6/2011 5:15:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.7		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.19	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-140-SA8N-SB-3.0-4.0 ***Collected:*** 6/7/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.7		6.3	MDL	7.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.22	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE175

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB15B261608	6/21/2011 4:08:00 PM	N-NITROSODIMETHYLAMINE	1.84 ng/L	EB15-SA5DN-SB-060711

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB15-SA5DN-SB-060711(RES)	N-NITROSODIMETHYLAMINE	1.71 ng/L	1.71U ng/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16008CB221116	6/14/2011 11:16:00 AM	PHOSPHORUS TIN	1.82 mg/Kg 1.75 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0
P16008CB221207	6/15/2011 12:07:00 PM	BORON	0.406 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5DN-QC-060711(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg
SL-140-SA8N-SB-3.0-4.0(RES)	TIN	2.42 mg/Kg	2.42U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16026CB220837A	6/11/2011 8:37:00 AM	LEAD VANADIUM	0.0160 mg/Kg 0.0337 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P61613AB321415A	6/11/2011 2:15:00 PM	EFH (C21-C30) EFH (C30-C40)	0.43 mg/Kg 0.90 mg/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5DN-QC-060711(REA2)	EFH (C30-C40)	1.0 mg/Kg	1.4U mg/Kg
SL-024-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.68 mg/Kg	1.4U mg/Kg
SL-036-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	0.51 mg/Kg	1.4U mg/Kg
SL-036-SA5DN-SB-9.0-10.0(REA2)	EFH (C21-C30)	0.50 mg/Kg	1.4U mg/Kg
SL-036-SA5DN-SB-9.0-10.0(REA2)	EFH (C30-C40)	0.85 mg/Kg	1.4U mg/Kg
SL-133-SA8N-SB-7.0-8.0(REA2)	EFH (C30-C40)	0.87 mg/Kg	1.4U mg/Kg
SL-140-SA8N-SB-3.0-4.0(REA2)	EFH (C30-C40)	0.73 mg/Kg	1.4U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB80B211220A	6/13/2011 12:20:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	9.9 ug/Kg 2.8 ug/Kg 0.10 ug/Kg	DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP13-SA5DN-QC-060711(RES)	ACETONE	9.0 ug/Kg	9.0U ug/Kg
DUP13-SA5DN-QC-060711(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.0U ug/Kg
DUP13-SA5DN-QC-060711(RES)	TOLUENE	0.16 ug/Kg	4.0U ug/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	ACETONE	8.1 ug/Kg	8.1U ug/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.7U ug/Kg
SL-024-SA5DN-SB-19.0-20.0(RES)	TOLUENE	0.14 ug/Kg	3.7U ug/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.0U ug/Kg
SL-024-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.20 ug/Kg	4.0U ug/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-026-SA5DN-SB-17.0-18.0(RES)	TOLUENE	0.15 ug/Kg	4.0U ug/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.1U ug/Kg
SL-026-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.17 ug/Kg	4.1U ug/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.5 ug/Kg	8.5U ug/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.1U ug/Kg
SL-036-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.1U ug/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	ACETONE	9.4 ug/Kg	9.4U ug/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.3U ug/Kg
SL-036-SA5DN-SB-9.0-10.0(RES)	TOLUENE	0.14 ug/Kg	4.3U ug/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	ACETONE	12 ug/Kg	12U ug/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.2U ug/Kg
SL-071-SA8N-SB-2.0-3.0(RES)	TOLUENE	0.13 ug/Kg	4.2U ug/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	ACETONE	8.3 ug/Kg	8.3U ug/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.1U ug/Kg
SL-122-SA8N-SB-2.0-3.0(RES)	TOLUENE	0.24 ug/Kg	4.1U ug/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	ACETONE	8.7 ug/Kg	8.7U ug/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-133-SA8N-SB-7.0-8.0(RES)	TOLUENE	0.19 ug/Kg	4.2U ug/Kg
SL-140-SA8N-SB-3.0-4.0(RES)	ACETONE	7.7 ug/Kg	7.7U ug/Kg
SL-140-SA8N-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.8U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: DE175_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-140-SA8N-SB-3.0-4.0(RES)	TOLUENE	0.22 ug/Kg	3.8U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MS SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	45 - -	27 48 53	59.00-109.00 63.00-107.00 63.00-107.00	49 (20.00) 34 (20.00) 33 (20.00)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)
SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	EFH (C21-C30)	-	-	49.00-123.00	25 (20.00)	EFH (C21-C30)	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	PETN	-	128	80.00-121.00	-	PETN	J(all detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MS SL-024-SA5DN -SB-4.0-5.0MSD (SL-024-SA5DN -SB-4.0-5.0)	m-Terphenyl	68	66	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN -SB-4.0-5.0MSD (DUP13 -SA5DN -QC-060711 SL -024-SA5DN -SB-19.0-20.0 SL -024-SA5DN -SB-4.0-5.0 SL -026-SA5DN -SB-17.0-18.0 SL -026-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-9.0-10.0 SL -071-SA8N -SB-2.0-3.0 SL -122-SA8N -SB-2.0-3.0 SL -133-SA8N -SB-7.0-8.0 SL -140-SA8N -SB-3.0-4.0)	BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD SILVER THALLIUM	- - - - - - - -	133 140 160 128 136 215 141 143	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - - - -	BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD SILVER THALLIUM	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	ANTIMONY ARSENIC NICKEL VANADIUM ZINC	61 - 54 61 51	- 214 160 223 190	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- 21 (20.00) 24 (20.00) 24 (20.00) -	ANTIMONY ARSENIC NICKEL VANADIUM ZINC	J(all detects) UJ(all non-detects) V, Zn, No Qual %R, >4x
SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	MOLYBDENUM	-	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	BARIUM	-65	-249	75.00-125.00	-	BARIUM	No Qual, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	ALUMINUM IRON MAGNESIUM POTASSIUM	5628 2370 616 167	5203 2376 442 156	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MAGNESIUM POTASSIUM	J(all detects) Al, Fe, Mg, No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS **SL-024-SA5DN-SB-4.0-5.0MSD** (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	CALCIUM	-586	-1127	75.00-125.00	24 (20.00)	CALCIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x
SL-024-SA5DN-SB-4.0-5.0MS **SL-024-SA5DN-SB-4.0-5.0MSD** (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	MANGANESE	231	539	75.00-125.00	29 (20.00)	MANGANESE	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS **SL-024-SA5DN-SB-4.0-5.0MSD** (SL-024-SA5DN-SB-4.0-5.0)	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHENOL	0 0	0 0	20.00-143.00 24.00-116.00	- -	2,4-DINITROPHENOL 4,6-DINITRO-2-METHYLPHEN	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (SL-024-SA5DN-SB-4.0-5.0)	1,2,4-TRICHLOROBENZENE	61	58	72.00-115.00	-	1,2,4-TRICHLOROBENZENE	J(all detects) UJ(all non-detects)
	1,2-DICHLOROBENZENE	55	52	66.00-108.00	-	1,2-DICHLOROBENZENE	
	1,3-DICHLOROBENZENE	52	50	63.00-109.00	-	1,3-DICHLOROBENZENE	
	1,4-DICHLOROBENZENE	52	50	70.00-100.00	-	1,4-DICHLOROBENZENE	
	1-METHYLNAPHTHALENE	67	68	73.00-112.00	-	1-METHYLNAPHTHALENE	
	2,4,5-TRICHLOROPHENOL	71	71	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4,6-TRICHLOROPHENOL	72	74	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	72	73	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	70	69	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	69	72	73.00-113.00	-	2,4-DINITROTOLUENE	
	2-CHLOROPHENOL	-	71	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	63	63	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	70	69	75.00-111.00	-	2-METHYLPHENOL	
	2-NITROPHENOL	53	55	74.00-115.00	-	2-NITROPHENOL	
	4-BROMOPHENYL-PHENYLETH	66	-	67.00-129.00	-	4-BROMOPHENYL-PHENYLET	
	4-CHLORO-3-METHYLPHENOL	73	74	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	67	69	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	65	64	71.00-111.00	-	4-METHYLPHENOL	
	ACENAPHTHENE	70	72	75.00-115.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	72	73	81.00-110.00	-	ACENAPHTHYLENE	
	ANTHRACENE	71	74	75.00-115.00	-	ANTHRACENE	
	BENZIDINE	18	22	35.00-141.00	-	BENZIDINE	
	BIS(2-CHLOROETHOXY)METHA	65	67	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	DIBENZOFURAN	70	-	71.00-112.00	-	DIBENZOFURAN	
	FLUORANTHENE	69	72	73.00-112.00	-	FLUORANTHENE	
	FLUORENE	72	74	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	70	73	77.00-114.00	-	HEXACHLOROBENZENE	
	HEXACHLOROBUTADIENE	56	55	62.00-120.00	-	HEXACHLOROBUTADIENE	
	HEXACHLOROETHANE	49	46	57.00-109.00	-	HEXACHLOROETHANE	
	ISOPHORONE	68	69	73.00-102.00	-	ISOPHORONE	
	NAPHTHALENE	62	62	72.00-116.00	-	NAPHTHALENE	
	NITROBENZENE	68	67	72.00-106.00	-	NITROBENZENE	
	N-NITROSODIPHENYLAMINE	69	70	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS SL-024-SA5DN-SB-4.0-5.0MSD (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	TITANIUM	173	355	75.00-125.00	-	TITANIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 Laboratory: LL

EDD Filename: DE175_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MSD (SL-024-SA5DN-SB-4.0-5.0)	ACENAPHTHYLENE Dimethylphthalate	- -	63 73	67.00-114.00 74.00-118.00	- -	ACENAPHTHYLENE Dimethylphthalate	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5DN-SB-4.0-5.0MS (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-140-SA8N-SB-3.0-4.0)	FLUORIDE	52	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-133-SA8N-SB-7.0-8.0MS (SL-133-SA8N-SB-7.0-8.0)	FLUORIDE	69	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-133-SA8N-SB-7.0-8.0DUP (SL-133-SA8N-SB-7.0-8.0)	FLUORIDE	22	20.00	No Qual, OK by Difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5DN-SB-4.0-5.0DUP (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	CALCIUM	51	20.00	J(all detects) UJ(all non-detects)
	MANGANESE	37	20.00	
	Zirconium	48	20.00	Zr, No Qual, OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5DN-SB-4.0-5.0DUP (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	COBALT	24	20.00	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5DN-SB-4.0-5.0DUP (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	MERCURY	73	20.00	No Qual, OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11601AQ321314A (EB15-SA5DN-SB-060711)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	135 130 130	- - -	78.00-126.00 80.00-124.00 80.00-120.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11626AQ240817A P11626AY240758A (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	Aroclor 5442	109	113	36.00-106.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16008CQ221119 (DUP13-SA5DN-QC-060711 SL-024-SA5DN-SB-19.0-20.0 SL-024-SA5DN-SB-4.0-5.0 SL-026-SA5DN-SB-17.0-18.0 SL-026-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-4.0-5.0 SL-036-SA5DN-SB-9.0-10.0 SL-071-SA8N-SB-2.0-3.0 SL-122-SA8N-SB-2.0-3.0 SL-133-SA8N-SB-7.0-8.0 SL-140-SA8N-SB-3.0-4.0)	ALUMINUM	79	-	80.00-120.00	-	ALUMINUM	No Qual, SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: PrepDE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
P0LFLCSQ260127 (DUP13 -SA5DN -QC-060711 SL -024-SA5DN -SB-19.0-20.0 SL -024-SA5DN -SB-4.0-5.0 SL -026-SA5DN -SB-17.0-18.0 SL -026-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-4.0-5.0 SL -036-SA5DN -SB-9.0-10.0 SL -071-SA8N -SB-2.0-3.0 SL -122-SA8N -SB-2.0-3.0 SL -133-SA8N -SB-7.0-8.0 SL -140-SA8N -SB-3.0-4.0)	1,2-DICHLOROBENZENE	77	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB15-SA5DN-SB-060711	N-Nitrosodimethylamine-d6	162	50.00-150.00	All Target Analytes	J (all detects)

Method: **8315A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-026-SA5DN-SB-4.0-5.0	Butyraldehyde	149	64.00-126.00	All Target Analytes	J(all detects)
SL-071-SA8N-SB-2.0-3.0	Butyraldehyde	147	64.00-126.00	All Target Analytes	J(all detects)
SL-122-SA8N-SB-2.0-3.0	Butyraldehyde	135	64.00-126.00	All Target Analytes	J(all detects)
SL-140-SA8N-SB-3.0-4.0	Butyraldehyde	131	64.00-126.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
MOISTURE	12.2	12.6	3		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
N-NITROSODIMETHYLAMINE	37.8 U	65.1	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
FLUORIDE	15.6	17.2	10	50.00	No Qualifiers Applied
Nitrate-NO3	1.5	1.9	24	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
ALUMINUM	25300	27800	9	50.00	No Qualifiers Applied
BORON	12.7	15.1	17	50.00	
CALCIUM	13800	8480	48	50.00	
IRON	34600	36000	4	50.00	
LITHIUM	24.8	26.2	5	50.00	
MAGNESIUM	7490	7090	5	50.00	
MANGANESE	365	567	43	50.00	
PHOSPHORUS	357	413	15	50.00	
POTASSIUM	3130	2930	7	50.00	
SODIUM	438	476	8	50.00	
STRONTIUM	45.3	43.6	4	50.00	
TIN	2.60	2.80	7	50.00	
TITANIUM	1410	1250	12	50.00	
Zirconium	3.58	4.86	30	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
ANTIMONY	0.255	0.271	6	50.00	No Qualifiers Applied
ARSENIC	7.61	7.52	1	50.00	
BARIUM	201	180	11	50.00	
BERYLLIUM	0.987	0.931	6	50.00	
CADMIUM	0.429	0.344	22	50.00	
CHROMIUM	34.4	32.9	4	50.00	
COBALT	16.7	12.6	28	50.00	
COPPER	19.5	17.7	10	50.00	
LEAD	13.5	13.2	2	50.00	
MOLYBDENUM	0.361	0.333	8	50.00	
NICKEL	35.0	28.5	20	50.00	
SELENIUM	0.119	0.0730	48	50.00	
SILVER	0.0547	0.0599	9	50.00	
THALLIUM	0.424	0.386	9	50.00	
VANADIUM	56.6	57.6	2	50.00	
ZINC	86.6	80.0	8	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
HEXAVALENT CHROMIUM	0.44	1.1 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
MERCURY	0.0048	0.114 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
EFH (C30-C40)	0.68	1.0	38	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
ACETONE	11	9.0	20	50.00	No Qualifiers Applied
METHYLENE CHLORIDE	1.7	1.4	19	50.00	
TOLUENE	0.20	0.16	22	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-024-SA5DN-SB-4.0-5.0	DUP13-SA5DN-QC-060711			
PH	8.81	8.43	4	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5DN-SB-060711	METHANOL	J	230	1000	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5DN-SB-17.0-18.0	N-NITROSODIMETHYLAMINE	J	27.1	36.2	PQL	ng/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	20.4	39.5	PQL	ng/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	29.3	38.9	PQL	ng/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	23.9	38.2	PQL	ng/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	33.0	35.5	PQL	ng/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	26.6	35.3	PQL	ng/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	N-NITROSODIMETHYLAMINE	J	24.7	37.2	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	TIN Zirconium	J J	2.80 4.86	11.2 5.61	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-024-SA5DN-SB-19.0-20.0	TIN Zirconium	J J	2.30 2.69	10.9 5.45	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.60 3.58	11.2 5.58	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-026-SA5DN-SB-17.0-18.0	TIN Zirconium	J J	2.75 2.26	10.7 5.35	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.75 2.93	11.9 5.93	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	TIN Zirconium	J J	2.56 3.20	11.4 5.72	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5DN-SB-9.0-10.0	TIN	J	2.70	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.62	5.66	PQL	mg/Kg	
SL-071-SA8N-SB-2.0-3.0	SODIUM	J	69.6	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	10.7	PQL	mg/Kg	
SL-122-SA8N-SB-2.0-3.0	SODIUM	J	61.0	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.41	10.4	PQL	mg/Kg	
	Zirconium	J	2.16	5.18	PQL	mg/Kg	
SL-133-SA8N-SB-7.0-8.0	TIN	J	2.87	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.76	5.65	PQL	mg/Kg	
SL-140-SA8N-SB-3.0-4.0	SODIUM	J	75.3	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.42	10.9	PQL	mg/Kg	
	Zirconium	J	2.19	5.46	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	SELENIUM	J	0.0730	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0599	0.111	PQL	mg/Kg	
SL-024-SA5DN-SB-19.0-20.0	SELENIUM	J	0.0758	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0212	0.109	PQL	mg/Kg	
SL-024-SA5DN-SB-4.0-5.0	SELENIUM	J	0.119	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0547	0.113	PQL	mg/Kg	
SL-026-SA5DN-SB-17.0-18.0	ANTIMONY	J	0.110	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0577	0.419	PQL	mg/Kg	
	SILVER	J	0.0167	0.105	PQL	mg/Kg	
SL-026-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.229	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.470	PQL	mg/Kg	
	SILVER	J	0.0595	0.117	PQL	mg/Kg	
SL-036-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.185	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0464	0.453	PQL	mg/Kg	
	SILVER	J	0.0368	0.113	PQL	mg/Kg	
SL-036-SA5DN-SB-9.0-10.0	SILVER	J	0.0712	0.113	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	ANTIMONY	J	0.135	0.210	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0615	0.105	PQL	mg/Kg	
SL-122-SA8N-SB-2.0-3.0	ANTIMONY	J	0.0967	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.159	0.422	PQL	mg/Kg	
	SILVER	J	0.0650	0.106	PQL	mg/Kg	
SL-133-SA8N-SB-7.0-8.0	ANTIMONY	J	0.198	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0793	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0507	0.448	PQL	mg/Kg	
SL-140-SA8N-SB-3.0-4.0	ANTIMONY	J	0.146	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.295	0.437	PQL	mg/Kg	
	SILVER	J	0.0370	0.109	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SB-19.0-20.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.41	1.2	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.33	1.2	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5DN-SB-4.0-5.0	MERCURY	J	0.0048	0.108	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	MERCURY	J	0.0278	0.117	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	MERCURY	J	0.0044	0.111	PQL	mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	MERCURY	J	0.0117	0.106	PQL	mg/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	MERCURY	J	0.0070	0.105	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	MERCURY	J	0.0108	0.107	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	EFH (C30-C40)	J	1.0	1.4	PQL	mg/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.68	1.4	PQL	mg/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	EFH (C15-C20)	J	1.2	2.9	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	EFH (C30-C40)	J	0.51	1.4	PQL	mg/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	EFH (C21-C30) EFH (C30-C40)	J J	0.50 0.85	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	EFH (C15-C20)	J	0.51	1.3	PQL	mg/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	EFH (C15-C20)	J	0.54	1.3	PQL	mg/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	EFH (C30-C40)	J	0.87	1.4	PQL	mg/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	EFH (C30-C40)	J	0.73	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE175 **Laboratory: LL**

EDD Filename: DE175_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	0.54	2.0	PQL	ug/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	Aroclor 5460	J	1.4	3.8	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5DN-QC-060711	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.16	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-024-SA5DN-SB-19.0-20.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.14	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-024-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.20	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-026-SA5DN-SB-17.0-18.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.15	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-026-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.17	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-036-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.11	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-036-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.14	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-071-SA8N-SB-2.0-3.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.13	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.24	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.19	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.22	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5DN-SB-17.0-18.0	CHRYSENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
SL-122-SA8N-SB-2.0-3.0	NAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
SL-133-SA8N-SB-7.0-8.0	ANTHRACENE NAPHTHALENE	J J	0.42 0.82	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-140-SA8N-SB-3.0-4.0	BENZO(B)FLUORANTHENE BENZO(K)FLUORANTHENE CHRYSENE FLUORANTHENE NAPHTHALENE PYRENE	J J J J J J	0.76 0.96 0.53 1.0 1.0 0.87	1.9 1.9 1.9 1.9 1.9 1.9	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

LDC #: 26277F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE175 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: MY

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	~~A~~ N	
III.	Calibration	N	
IV.	Blanks	A	M fuel
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD out RPD out RPD out.
VI.	Matrix Spike Analysis	N	Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn 7Y, Na fuel %R
VII.	Duplicate Sample Analysis	N	Hg, Zn <5X
VIII.	Laboratory Control Samples (LCS)	N A	SRM
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr, V
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-024-SA5DN-SB4.0-5.0	11	SL-133-SA8N-SB-7.0-8.0	21		31	
2	SL-024-SA5DN-SB19.0-20.0	12	SL-024-SA5DN-SB4.0-5.0MS	22		32	
3	SL-026-SA5DN-SB4.0-5.0	13	SL-024-SA5DN-SB4.0-5.0MSD	23		33	
4	SL-026-SA5DN-SB17.0-18.0	14	SL-024-SA5DN-SB4.0-5.0DUP	24		34	
5	SL-036-SA5DN-SB4.0-5.0	15		25		35	
6	SL-036-SA5DN-SB9.0-10.0	16		26		36	
7	DUP13-SA5DN-QC-060711	17		27		37	
8	SL-071-SA8N-SB-2.0-3.0	18		28		38	
9	SL-122-SA8N-SB-2.0-3.0	19		29		39	
10	SL-140-SA8N-SB-3.0-4.0	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE175
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6309733BKG Matrix Spike Lab Sample ID: 6309734MS Matrix Spike Duplicate Lab Sample ID: 6309735MSD
% Solids for Sample: 87.8
Batch Id(s): P16008C, P16026C, P15911F, P16608A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		25340.2675		38034.1641		36959.0167		225.5351	223.3240	MG/KG	5628		5203		3			20	P
Antimony	121	0.2549		1.0828		1.3159		1.3532	1.3142	MG/KG	61	N	81		19		75 - 125	20	MS
Arsenic	75	7.6118		9.9596		12.3051		2.2554	2.1903	MG/KG	104		214	N	21	*	75 - 125	20	MS
Barium	137	201.2450		193.9602		173.9640		11.2768	10.9515	MG/KG	-65		-249		11			20	MS
Beryllium	9	0.9872		1.9315		2.1546		0.9021	0.8761	MG/KG	105		133	N	11		75 - 125	20	MS
Boron		12.7183		234.0400		228.4638		225.5351	223.3240	MG/KG	98		97		2		84 - 115	20	P
Cadmium	111	0.4294		1.7368		1.9660		1.1277	1.0951	MG/KG	116		140	N	12		75 - 125	20	MS
Calcium		13806.7254		11165.0714		8775.0190		451.0702	446.6479	MG/KG	-586		-1127		24	*		20	P
Chromium	52	34.3715		43.4381		51.9099		11.2768	10.9515	MG/KG	80		160	N	18		75 - 125	20	MS
Cobalt	59	16.6873		70.8631		86.6261		56.3838	54.7573	MG/KG	96		128	N	20		75 - 125	20	MS
Copper	63	19.5201		28.6430		34.4095		11.2768	10.9515	MG/KG	81		136	N	18		75 - 125	20	MS
Iron		34636.6966		37309.4285		37289.7126		112.7675	111.6620	MG/KG	2370		2376		0			20	P
Lead	208	13.4915		16.8655		20.5559		3.3830	3.2854	MG/KG	100		215		20		75 - 125		MS
Lithium		24.7834		145.0698		142.5030		112.7675	111.6620	MG/KG	107		105		2		82 - 114	20	P
Magnesium		7488.8025		8878.6644		8474.8314		225.5351	223.3240	MG/KG	616		442		5			20	P
Manganese		365.2028		495.4397		666.0536		56.3838	55.8310	MG/KG	231		539		29	*		20	P
Mercury		0.0048	B	0.1720		0.1868		0.1760	0.1850	MG/KG	95		98		8		65 - 135	20	CV
Molybdenum	98	0.3613		13.8050		15.1809		11.2768	10.9515	MG/KG	119		135	N	9		75 - 125	20	MS
Nickel	60	34.9579		41.0248		52.4575		11.2768	10.9515	MG/KG	54	N	160	N	24	*	75 - 125	20	MS
Phosphorus		356.5345		494.7507		493.7335		112.7675	111.6620	MG/KG	123		123		0		75 - 125	20	P
Potassium		3131.8583		5011.7109		4872.8862		1127.6754	1116.6198	MG/KG	167	N	156	N	3		75 - 125	20	P
Selenium	78	0.1193	B	2.5440		2.6393		2.2554	2.1903	MG/KG	108		115		4		75 - 125	20	MS
Silver	107	0.0547	B	14.0734		15.4832		11.2768	10.9515	MG/KG	124		141	N	10		75 - 125	20	MS
Sodium		437.5341		1544.6706		1525.7895		1127.6754	1116.6198	MG/KG	98		97		1		75 - 125	20	P
Strontium		45.3124		155.0757		150.0357		112.7675	111.6620	MG/KG	97		94		3		75 - 115	20	P
Thallium	203	0.4236		0.9400		1.0507		0.4511	0.4381	MG/KG	114		143	N	11		75 - 125	20	MS
Tin		2.6040	B	391.6428		385.7899		451.0702	446.6479	MG/KG	86		86		2		80 - 110	20	P
Titanium		1412.3677		1605.7807		1817.1344		111.6620	113.8952	MG/KG	173		355		12			20	P
Vanadium	51	56.5642		63.3979		80.9970		11.2768	10.9515	MG/KG	61		223		24	*		20	MS
Zinc	66	86.5829		92.3792		107.3681		11.2768	10.9515	MG/KG	51		190		15			20	MS
Zirconium		3.5776	B	117.9797		115.6840		112.7675	111.6620	MG/KG	101		100		2		75 - 125	20	P

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

SAMPLE DELIVERY GROUP

DE176

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	TB-060811	6310784	TB	5030B	8015M	IV
08-Jun-2011	TB-060811	6310784	TB	5030B	8260B	IV
08-Jun-2011	TB-060811	6310784	TB	5030B	8260B SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3050B	6010B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3050B	6020	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3060A	7199	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3546	1625C	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8082	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8270C	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	3550B	8270C SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	5035	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	5035	8260B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	5035	8260B SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	8330	8330A	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	300.0	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	314.0	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	7471A	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	8315A	IV
08-Jun-2011	SL-025-SA5DN-SB-4.0-5.0	6310769	N	METHOD	9012B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3050B	6010B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3050B	6020	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3060A	7199	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3546	1625C	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8082	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8270C	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	3550B	8270C SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	5035	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	5035	8260B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	5035	8260B SIM	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	8330	8330A	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	300.0	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	314.0	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	7471A	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	8015B	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	8015M	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	8315A	IV
08-Jun-2011	SL-025-SA5DN-SB-23.0-24.0	6310770	N	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3546	1625C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	3550B	8270C SIM	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	314.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0	6310775	N	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3546	1625C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	3550B	8270C SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	314.0	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MS	6310776	MS	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3546	1625C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	3550B	8270C SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0MSD	6310777	MSD	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	314.0	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-4.0-5.0DUP	6310778	DUP	METHOD	9012B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3050B	6010B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3050B	6020	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3060A	7199	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3546	1625C	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8015B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8015M	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8082	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8270C	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	3550B	8270C SIM	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	5035	8015M	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	5035	8260B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	5035	8260B SIM	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	8330	8330A	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	300.0	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	314.0	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	7471A	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	8015B	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	8015M	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	8315A	IV
08-Jun-2011	DUP10-SA8N-QC-060811	6310783	FD	METHOD	9012B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3050B	6010B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3050B	6020	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3060A	7199	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3546	1625C	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8082	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8270C	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	3550B	8270C SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	5035	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	5035	8260B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	5035	8260B SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	8330	8330A	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	300.0	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	314.0	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	7471A	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	8315A	IV
08-Jun-2011	SL-023-SA5DN-SB-4.0-5.0	6310767	N	METHOD	9012B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3050B	6010B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3050B	6020	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3060A	7199	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3546	1625C	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8082	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8270C	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	3550B	8270C SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	5035	8015M	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	5035	8260B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	5035	8260B SIM	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	8330	8330A	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	300.0	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	314.0	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	6850	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	7471A	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	8015B	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	8015M	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	8315A	IV
08-Jun-2011	SL-023-SA5DN-SB-20.0-21.0	6310768	N	METHOD	9012B	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3005A	6010B	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3020A	6020	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3510C	8082	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3510C	8270C	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	3510C	8270C SIM	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	5030B	8260B	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	5030B	8260B SIM	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	Gen Prep	300.0	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	Gen Prep	314.0	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	Gen Prep	7199	IV
08-Jun-2011	EB16-SA8N-SB-060811	6310785	EB	METHOD	7470A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3050B	6010B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3050B	6020	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3060A	7199	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3546	1625C	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8082	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8270C	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	3550B	8270C SIM	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	5035	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	5035	8260B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	5035	8260B SIM	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	8330	8330A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	300.0	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	314.0	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	7471A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	8015B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	8015M	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	8315A	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5	6310779	N	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5DUP	P310779D270824A	DUP	METHOD	9012B	IV
08-Jun-2011	SL-076-SA8N-SB-7.5-8.5MS	P310779R270825A	MS	METHOD	9012B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3050B	6010B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3050B	6020	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3060A	7199	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3546	1625C	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8082	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8270C	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	3550B	8270C SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	5035	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	5035	8260B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	5035	8260B SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	8330	8330A	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	300.0	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	314.0	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	6850	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	7471A	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	8315A	IV
08-Jun-2011	SL-028-SA5DN-SB-4.0-5.0	6310771	N	METHOD	9012B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3050B	6010B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3050B	6020	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3060A	7199	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3546	1625C	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8082	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8270C	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	3550B	8270C SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	5035	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	5035	8260B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	5035	8260B SIM	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	8330	8330A	IV

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	300.0	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	314.0	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	7471A	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	8015B	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	8015M	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	8315A	IV
08-Jun-2011	SL-028-SA5DN-SB-11.5-12.5	6310772	N	METHOD	9012B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3050B	6010B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3050B	6020	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3060A	7199	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3546	1625C	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8015B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8015M	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8082	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8270C	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	3550B	8270C SIM	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	5035	8015M	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	5035	8260B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	5035	8260B SIM	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	8330	8330A	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	300.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	314.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	7471A	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	8015B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	8015M	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	8315A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5	6310780	N	METHOD	9012B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3050B	6010B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3050B	6020	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3060A	7199	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3546	1625C	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8082	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8270C	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	3550B	8270C SIM	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	5035	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	5035	8260B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	5035	8260B SIM	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	8330	8330A	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	300.0	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	314.0	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	7471A	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	8315A	IV
08-Jun-2011	SL-109-SA8N-SB-4.0-5.0	6310781	N	METHOD	9012B	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5DUP	P310780D271933B	DUP	METHOD	300.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5DUP	P310780D272103B	DUP	METHOD	314.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5MS	P310780R271948B	MS	METHOD	300.0	IV
08-Jun-2011	SL-106-SA8N-SB-2.5-3.5MS	P310780R272150B	MS	METHOD	314.0	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3050B	6010B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3050B	6020	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3060A	7199	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3546	1625C	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8082	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8270C	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	3550B	8270C SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	5035	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	5035	8260B	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	5035	8260B SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	8330	8330A	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	300.0	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	314.0	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	7471A	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	8315A	IV
08-Jun-2011	SL-051-SA5DN-SB-4.0-5.0	6310773	N	METHOD	9012B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3050B	6010B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3050B	6020	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3060A	7199	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3546	1625C	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8082	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8270C	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	3550B	8270C SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	5035	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	5035	8260B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	5035	8260B SIM	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	8330	8330A	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	300.0	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	314.0	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	7471A	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	8015B	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	8015M	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	8315A	IV
08-Jun-2011	SL-051-SA5DN-SB-14.0-15.0	6310774	N	METHOD	9012B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3050B	6010B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3050B	6020	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3060A	7199	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3546	1625C	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8082	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8270C	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	3550B	8270C SIM	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	5035	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	5035	8260B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	5035	8260B SIM	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	8330	8330A	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	300.0	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	314.0	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	7471A	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	8015B	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	8015M	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	8315A	IV
08-Jun-2011	SL-109-SA8N-SB-9.0-10.0	6310782	N	METHOD	9012B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	2.0		0.90	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.0		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	18.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.94	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.94	MDL	1.8	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	18.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-7.5-8.5 ***Collected:*** 6/8/2011 2:00:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.1		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	3.9		0.92	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-109-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.92	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-109-SA8N-SB-9.0-10.0 ***Collected:*** 6/8/2011 3:55:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.0		0.92	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.54	J	0.395	MDL	5.49	PQL	mg/Kg	J	Z
MANGANESE	230		0.0395	MDL	0.549	PQL	mg/Kg	J	E
TIN	2.82	J	0.351	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.14	J	0.505	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	259		0.0384	MDL	0.533	PQL	mg/Kg	J	E
TIN	2.48	J	0.341	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.18	J	0.491	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	362		0.0408	MDL	0.567	PQL	mg/Kg	J	E
TIN	2.71	J	0.363	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.26	J	0.522	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.75	J	0.384	MDL	5.34	PQL	mg/Kg	J	Z
MANGANESE	128		0.0384	MDL	0.534	PQL	mg/Kg	J	E
TIN	2.51	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.491	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	660		0.0403	MDL	0.559	PQL	mg/Kg	J	E
TIN	2.59	J	0.358	MDL	11.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.61	J	0.515	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	330		0.0391	MDL	0.544	PQL	mg/Kg	J	E
TIN	2.45	J	0.348	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.69	J	0.500	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	434		0.0413	MDL	0.573	PQL	mg/Kg	J	E
TIN	2.84	J	0.367	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.07	J	0.527	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	203		0.0399	MDL	0.554	PQL	mg/Kg	J	E
TIN	2.50	J	0.355	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.85	J	0.510	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	592		0.0408	MDL	0.567	PQL	mg/Kg	J	E
TIN	2.66	J	0.363	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.18	J	0.522	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.48	J	0.398	MDL	5.53	PQL	mg/Kg	J	Z
MANGANESE	280		0.0398	MDL	0.553	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.85	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.47	J	0.509	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-7.5-8.5 ***Collected:*** 6/8/2011 2:00:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.81	J	0.402	MDL	5.59	PQL	mg/Kg	J	Z
MANGANESE	156		0.0402	MDL	0.559	PQL	mg/Kg	J	E
TIN	3.00	J	0.358	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.24	J	0.514	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.39	J	0.404	MDL	5.61	PQL	mg/Kg	J	Z
MANGANESE	137		0.0404	MDL	0.561	PQL	mg/Kg	J	E
TIN	3.19	J	0.359	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.94	J	0.516	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.38	J	0.413	MDL	5.73	PQL	mg/Kg	J	Z
MANGANESE	276		0.0413	MDL	0.573	PQL	mg/Kg	J	E
SODIUM	85.2	J	6.82	MDL	115	PQL	mg/Kg	J	Z
TIN	3.03	J	0.367	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.42	J	0.528	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA8N-SB-9.0-10.0 ***Collected:*** 6/8/2011 3:55:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.53	J	0.412	MDL	5.72	PQL	mg/Kg	J	Z
MANGANESE	298		0.0412	MDL	0.572	PQL	mg/Kg	J	E
TIN	2.76	J	0.366	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.38	J	0.527	MDL	5.72	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000066	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.201	J	0.0821	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	11.5		0.0887	MDL	0.444	PQL	mg/Kg	J	E
BERYLLIUM	1.07		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.113		0.0488	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	8.70		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	12.6		0.0887	MDL	0.444	PQL	mg/Kg	J	Q, A
LEAD	9.71		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	20.0		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0883	J	0.0157	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.406		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	49.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0643	MDL	0.444	PQL	mg/Kg	J	Z, Q

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.45		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.323		0.0790	MDL	0.213	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.43		0.0854	MDL	0.427	PQL	mg/Kg	J	E
BERYLLIUM	1.06		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	34.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	17.3		0.0213	MDL	0.107	PQL	mg/Kg	J	Q
COPPER	21.8		0.0854	MDL	0.427	PQL	mg/Kg	J	Q, A
LEAD	11.1		0.0109	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	31.2		0.107	MDL	0.427	PQL	mg/Kg	J	Q
SILVER	0.104	J	0.0151	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.480		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	59.0		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.135		0.0469	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-20.0-21.0 ***Collected:*** 6/8/2011 11:30:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.763		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-023-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 11:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.361		0.0815	MDL	0.220	PQL	mg/Kg	J	Q
ARSENIC	9.03		0.0881	MDL	0.440	PQL	mg/Kg	J	E
BERYLLIUM	1.06		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0484	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	35.4		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	12.6		0.0220	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	20.5		0.0881	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	12.6		0.0112	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	26.7		0.110	MDL	0.440	PQL	mg/Kg	J	Q
SILVER	0.0545	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.400		0.0330	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-023-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 11:15:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	64.2		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-023-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 11:15:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0638	MDL	0.440	PQL	mg/Kg	J	Z, Q

Sample ID: SL-023-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 11:15:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.592		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5DN-SB-23.0-24.0 ***Collected:*** 6/8/2011 9:40:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0805	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	5.77		0.0870	MDL	0.435	PQL	mg/Kg	J	E
BERYLLIUM	0.590		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0864	J	0.0479	MDL	0.109	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.8		0.131	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	4.17		0.0218	MDL	0.109	PQL	mg/Kg	J	Q
COPPER	13.3		0.0870	MDL	0.435	PQL	mg/Kg	J	Q, A
LEAD	5.61		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	13.6		0.109	MDL	0.435	PQL	mg/Kg	J	Q
SILVER	0.0450	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	38.1		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-025-SA5DN-SB-23.0-24.0 ***Collected:*** 6/8/2011 9:40:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.245		0.0544	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.465		0.0828	MDL	0.224	PQL	mg/Kg	J	Q
ARSENIC	10.5		0.0895	MDL	0.448	PQL	mg/Kg	J	E
BERYLLIUM	1.57		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.324		0.0492	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	42.5		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	23.6		0.0224	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	24.3		0.0895	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	14.8		0.0114	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	45.0		0.112	MDL	0.448	PQL	mg/Kg	J	Q
SILVER	0.0468	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.468		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	75.0		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0811	J	0.0649	MDL	0.448	PQL	mg/Kg	J	Z, Q

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.559		0.0559	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.405		0.0797	MDL	0.215	PQL	mg/Kg	J	Q
ARSENIC	7.50		0.0861	MDL	0.431	PQL	mg/Kg	J	E
BERYLLIUM	0.714		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.207		0.0474	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	32.2		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
COBALT	8.61		0.0215	MDL	0.108	PQL	mg/Kg	J	Q
COPPER	20.7		0.0861	MDL	0.431	PQL	mg/Kg	J	Q, A
LEAD	8.14		0.0110	MDL	0.215	PQL	mg/Kg	J	Q, E
NICKEL	21.6		0.108	MDL	0.431	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0501	J	0.0153	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.317		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	79.6		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0625	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.11		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.731		0.0865	MDL	0.234	PQL	mg/Kg	J	Q
ARSENIC	8.54		0.0936	MDL	0.468	PQL	mg/Kg	J	E
BERYLLIUM	1.06		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.414		0.0515	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	48.2		0.140	MDL	0.468	PQL	mg/Kg	J	Q, A
COBALT	14.9		0.0234	MDL	0.117	PQL	mg/Kg	J	Q
COPPER	53.1		0.0936	MDL	0.468	PQL	mg/Kg	J	Q, A
LEAD	13.4		0.0119	MDL	0.234	PQL	mg/Kg	J	Q, E
NICKEL	38.9		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.108	J	0.0166	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.483		0.0351	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	65.6		0.0257	MDL	0.117	PQL	mg/Kg	J	Q, A

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.247	J	0.0678	MDL	0.468	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.30		0.0585	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.316		0.0828	MDL	0.224	PQL	mg/Kg	J	Q
ARSENIC	7.26		0.0895	MDL	0.448	PQL	mg/Kg	J	E
BERYLLIUM	0.883		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.335		0.0492	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	31.9		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	12.5		0.0224	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	17.6		0.0895	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	9.94		0.0114	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	28.8		0.112	MDL	0.448	PQL	mg/Kg	J	Q
SILVER	0.0477	J	0.0159	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.425		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	56.7		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.606		0.0560	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.442		0.0839	MDL	0.227	PQL	mg/Kg	J	Q
ARSENIC	10.6		0.0907	MDL	0.454	PQL	mg/Kg	J	E
BERYLLIUM	1.82		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.427		0.0499	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	42.9		0.136	MDL	0.454	PQL	mg/Kg	J	Q, A
COBALT	17.8		0.0227	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	22.4		0.0907	MDL	0.454	PQL	mg/Kg	J	Q, A
LEAD	15.2		0.0116	MDL	0.227	PQL	mg/Kg	J	Q, E
NICKEL	40.2		0.113	MDL	0.454	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0596	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.500		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	75.3		0.0249	MDL	0.113	PQL	mg/Kg	J	Q, A

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0658	MDL	0.454	PQL	mg/Kg	J	Z, Q

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.488		0.0567	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.275		0.0835	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	9.52		0.0903	MDL	0.451	PQL	mg/Kg	J	E
BERYLLIUM	0.872		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0781	J	0.0497	MDL	0.113	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.8		0.135	MDL	0.451	PQL	mg/Kg	J	Q, A
COBALT	6.63		0.0226	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	10.2		0.0903	MDL	0.451	PQL	mg/Kg	J	Q, A
LEAD	7.66		0.0115	MDL	0.226	PQL	mg/Kg	J	Q, E
NICKEL	16.0		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.0697	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.333		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	40.1		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, A

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** REA6 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0655	MDL	0.451	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.18		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.169	J	0.0843	MDL	0.228	PQL	mg/Kg	J	Z, Q
ARSENIC	11.6		0.0911	MDL	0.456	PQL	mg/Kg	J	E
BERYLLIUM	0.791		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.0512	J	0.0501	MDL	0.114	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.0		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
COBALT	7.48		0.0228	MDL	0.114	PQL	mg/Kg	J	Q
COPPER	8.54		0.0911	MDL	0.456	PQL	mg/Kg	J	Q, A
LEAD	8.54		0.0116	MDL	0.228	PQL	mg/Kg	J	Q, E
NICKEL	15.0		0.114	MDL	0.456	PQL	mg/Kg	J	Q
SILVER	0.130		0.0162	MDL	0.114	PQL	mg/Kg	J	Q
THALLIUM	0.295		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	42.8		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, A

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0661	MDL	0.456	PQL	mg/Kg	J	Z, Q

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.18		0.0570	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.177	J	0.0855	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.72		0.0924	MDL	0.462	PQL	mg/Kg	J	E
BERYLLIUM	0.690		0.0185	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.0653	J	0.0508	MDL	0.115	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.6		0.139	MDL	0.462	PQL	mg/Kg	J	Q, A
COBALT	5.25		0.0231	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	10.5		0.0924	MDL	0.462	PQL	mg/Kg	J	Q, A
LEAD	7.72		0.0118	MDL	0.231	PQL	mg/Kg	J	Q, E
NICKEL	12.0		0.115	MDL	0.462	PQL	mg/Kg	J	Q
SILVER	0.0210	J	0.0164	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0346	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	36.0		0.0254	MDL	0.115	PQL	mg/Kg	J	Q, A

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.436		0.0577	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.214	J	0.0849	MDL	0.229	PQL	mg/Kg	J	Z, Q
ARSENIC	7.38		0.0917	MDL	0.459	PQL	mg/Kg	J	E
BERYLLIUM	0.765		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CADMIUM	0.161		0.0505	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.138	MDL	0.459	PQL	mg/Kg	J	Q, A
COBALT	8.83		0.0229	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	14.5		0.0917	MDL	0.459	PQL	mg/Kg	J	Q, A
LEAD	7.63		0.0117	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	19.3		0.115	MDL	0.459	PQL	mg/Kg	J	Q
SILVER	0.0258	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.336		0.0344	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	45.3		0.0252	MDL	0.115	PQL	mg/Kg	J	Q, A

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.409		0.0573	MDL	0.115	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.216	J	0.0823	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	9.47		0.0889	MDL	0.445	PQL	mg/Kg	J	E
BERYLLIUM	0.870		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.175		0.0489	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	26.1		0.133	MDL	0.445	PQL	mg/Kg	J	Q, A
COBALT	10.7		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	16.3		0.0889	MDL	0.445	PQL	mg/Kg	J	Q, A
LEAD	11.2		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	21.8		0.111	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0633	J	0.0158	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	50.8		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.476		0.0556	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS **Method:** 7199 **Matrix:** AQ

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.51	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.77	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7470A **Matrix:** AQ

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000060	J	0.000046	MDL	0.00020	PQL	mg/L	U	B

Method Category: METALS **Method:** 7471A **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0320	J	0.0077	MDL	0.110	PQL	mg/Kg	U	F

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0194	J	0.0077	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0085	J	0.0080	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0242	J	0.0075	MDL	0.107	PQL	mg/Kg	U	F

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	19.3	J	18.7	MDL	37.5	PQL	ng/Kg	J	Z, FD

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	34.3	J	18.7	MDL	37.4	PQL	ng/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	30.4	J	18.8	MDL	37.6	PQL	ng/Kg	J	Z

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	29.0	J	18.8	MDL	37.5	PQL	ng/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	18.7	U	18.7	MDL	37.4	PQL	ng/Kg	UJ	Q, FD

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	22.5	J	19.1	MDL	38.2	PQL	ng/Kg	J	Z, S

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	31.0	J	19.1	MDL	38.1	PQL	ng/Kg	J	Z

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	190	U	190	MDL	380	PQL	ng/Kg	UJ	H

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: PrepDE176_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 1625C **Matrix:** SO

Method Category: SVOA **Method:** 8015M **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.54	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z, FD
EFH (C8-C11)	0.99	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.70	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.47	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.3	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	0.49	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.4		0.44	MDL	1.3	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	1.2	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.1	J	0.45	MDL	1.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.57	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.99	J	0.47	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.50	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.55	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q
Propylene glycol	5.6	U	5.6	MDL	11	PQL	mg/Kg	UJ	Q

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.45	U	0.45	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	2.1		0.45	MDL	1.4	PQL	mg/Kg	J	Q
EFH (C30-C40)	4.8		0.45	MDL	1.4	PQL	mg/Kg	J	Q, Q
EFH (C8-C11)	1.2	J	0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.49	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.2	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	1.2	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.95	J	0.46	MDL	1.4	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	C

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-025-SA5DN-SB-23.0-24.0 ***Collected:*** 6/8/2011 9:40:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	120		1.8	MDL	9.4	PQL	ug/Kg	J	*#
AROCLOR 1254	77		1.8	MDL	9.4	PQL	ug/Kg	J	*#
Aroclor 5432	5.6	U	5.6	MDL	18	PQL	ug/Kg	UJ	C

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.58	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z, *XIII
AROCLOR 1260	0.54	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1232	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1260	3.4		0.44	MDL	1.9	PQL	ug/Kg	J	* XIII
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1016	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1221	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
AROCLOR 1232	0.38	U	0.38	MDL	2.0	PQL	ug/Kg	UJ	C
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2-NITROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	49	J	19	MDL	380	PQL	ug/Kg	UJ	B, FD

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-025-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 9:30:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-028-SA5DN-SB-11.5-12.5 ***Collected:*** 6/8/2011 2:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
2-NITROPHENOL	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-028-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 2:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-051-SA5DN-SB-14.0-15.0 ***Collected:*** 6/8/2011 3:35:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-051-SA5DN-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:25:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	19	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4,5-TRICHLOROPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 10:05:00 ***Analysis Type:*** RES-ACID ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DIMETHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DINITROTOLUENE	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
4-CHLORO-3-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
4-CHLOROPHENYL-PHENYLETHER	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
4-METHYLPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q
BENZYL ALCOHOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	19	MDL	370	PQL	ug/Kg	UJ	B, FD
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

Sample ID: SL-076-SA8N-SB-7.5-8.5 ***Collected:*** 6/8/2011 2:00:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-106-SA8N-SB-2.5-3.5 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-109-SA8N-SB-4.0-5.0 ***Collected:*** 6/8/2011 3:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	380	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB16-SA8N-SB-060811 *Collected:* 6/8/2011 1:45:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.069	J	0.052	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.30	J	0.052	MDL	1.0	PQL	ug/L	J	Z, L
Di-n-butylphthalate	0.71	J	0.052	MDL	1.0	PQL	ug/L	J	Z, L
NAPHTHALENE	0.060		0.031	MDL	0.052	PQL	ug/L	J	L

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	10	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.80	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.94	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	44	U	44	MDL	130	PQL	ug/Kg	UJ	Q

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.7	U	1.7	MDL	4.0	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP10-SA8N-QC-060811 *Collected:* 6/8/2011 10:10:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.0		6.5	MDL	7.8	PQL	ug/Kg	UJ	B, FD
METHYLENE CHLORIDE	1.6	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.30	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-023-SA5DN-SB-20.0-21.0 *Collected:* 6/8/2011 11:30:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.3		6.5	MDL	7.8	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.24	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-023-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 11:15:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.3		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.12	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5DN-SB-23.0-24.0 *Collected:* 6/8/2011 9:40:00 AM *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.5		7.2	MDL	8.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.8	J	0.26	MDL	4.3	PQL	ug/Kg	UJ	L, B
TOLUENE	0.19	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 9:30:00 AM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.4		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.5	J	0.24	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.16	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-028-SA5DN-SB-11.5-12.5 *Collected:* 6/8/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.5		7.6	MDL	9.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.27	MDL	4.5	PQL	ug/Kg	UJ	L, B
TOLUENE	0.14	J	0.09	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-028-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.14	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-051-SA5DN-SB-14.0-15.0 *Collected:* 6/8/2011 3:35:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.8		6.6	MDL	7.9	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.14	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-051-SA5DN-SB-4.0-5.0 *Collected:* 6/8/2011 3:25:00 PM *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	9.1		7.3	MDL	8.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.4	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.09	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-076-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 10:05:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6.3	U	6.3	MDL	7.5	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	1.3	J	0.22	MDL	3.7	PQL	ug/Kg	UJ	L, B
TOLUENE	0.28	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		6.8	MDL	8.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory:** LL

EDD Filename: PrepDE176_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-076-SA8N-SB-7.5-8.5 *Collected:* 6/8/2011 2:00:00 PM *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.20	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-106-SA8N-SB-2.5-3.5 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2		6.4	MDL	7.6	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.6	J	0.23	MDL	3.8	PQL	ug/Kg	UJ	L, B
TOLUENE	0.19	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-109-SA8N-SB-4.0-5.0 *Collected:* 6/8/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.5	J	1.2	MDL	8.1	PQL	ug/Kg	J	Z
ACETONE	27		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.0	J	0.24	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.12	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-109-SA8N-SB-9.0-10.0 *Collected:* 6/8/2011 3:55:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.5	J	1.2	MDL	8.1	PQL	ug/Kg	J	Z
ACETONE	32		6.8	MDL	8.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	1.7	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.16	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*XIII	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE176

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE176 **Laboratory: LL**
EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: 3546**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB16-SA8N-SB-060811 (RES)	Sampling To Analysis	24.50	24.00	HOURS	J(all detects) UJ(all non-detects)

Method: 1625C **Preparation Method: 3546**
Matrix: SO

Sample ID	Type	Actual	Criteria	Units	Flag
SL-109-SA8N-SB-9.0-10.0 (RES)	Sampling To Extraction	21.00	14.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: DE176_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16048CB221243	6/10/2011 12:43:00 PM	MAGNESIUM	0.0195 mg/L	EB16-SA8N-SB-060811

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16708BB220702	6/18/2011 7:02:00 AM	CALCIUM	4.40 mg/Kg	DUP10-SA8N-QC-060811
		IRON	4.74 mg/Kg	SL-023-SA5DN-SB-20.0-21.0
		MAGNESIUM	1.04 mg/Kg	SL-023-SA5DN-SB-4.0-5.0
		PHOSPHORUS	1.62 mg/Kg	SL-025-SA5DN-SB-23.0-24.0
		TIN	1.79 mg/Kg	SL-025-SA5DN-SB-4.0-5.0
				SL-028-SA5DN-SB-11.5-12.5
				SL-028-SA5DN-SB-4.0-5.0
				SL-051-SA5DN-SB-14.0-15.0
				SL-051-SA5DN-SB-4.0-5.0
				SL-076-SA8N-SB-4.0-5.0
				SL-076-SA8N-SB-7.5-8.5
				SL-106-SA8N-SB-2.5-3.5
				SL-109-SA8N-SB-4.0-5.0
				SL-109-SA8N-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(REA2)	TIN	2.82 mg/Kg	2.82U mg/Kg
SL-023-SA5DN-SB-20.0-21.0(REA2)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-023-SA5DN-SB-4.0-5.0(REA2)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-025-SA5DN-SB-23.0-24.0(REA2)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-025-SA5DN-SB-4.0-5.0(REA2)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-028-SA5DN-SB-11.5-12.5(REA2)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-028-SA5DN-SB-4.0-5.0(REA2)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-051-SA5DN-SB-14.0-15.0(REA2)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-051-SA5DN-SB-4.0-5.0(REA2)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-076-SA8N-SB-4.0-5.0(REA2)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-076-SA8N-SB-7.5-8.5(REA2)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-106-SA8N-SB-2.5-3.5(REA2)	TIN	3.19 mg/Kg	3.19U mg/Kg
SL-109-SA8N-SB-4.0-5.0(REA2)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-109-SA8N-SB-9.0-10.0(REA2)	TIN	2.76 mg/Kg	2.76U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16726AB220905A	6/17/2011 9:05:00 AM	LEAD	0.0152 mg/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

Method: **7470A**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16013BB221002	6/11/2011 10:02:00 AM	MERCURY	0.00012 mg/L	EB16-SA8N-SB-060811

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA8N-SB-060811(RES)	MERCURY	0.000060 mg/L	0.000060U mg/L

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P67671AB320809A	6/18/2011 8:09:00 AM	EFH (C8-C11)	1.1 mg/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(REA2)	EFH (C8-C11)	0.99 mg/Kg	1.4U mg/Kg
SL-023-SA5DN-SB-20.0-21.0(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.3U mg/Kg
SL-023-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.3 mg/Kg	1.4U mg/Kg
SL-025-SA5DN-SB-23.0-24.0(REA2)	EFH (C8-C11)	1.4 mg/Kg	1.4U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-028-SA5DN-SB-11.5-12.5(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.3U mg/Kg
SL-028-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	0.99 mg/Kg	1.4U mg/Kg
SL-051-SA5DN-SB-14.0-15.0(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-051-SA5DN-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-7.5-8.5(REA2)	EFH (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-106-SA8N-SB-2.5-3.5(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-4.0-5.0(REA2)	EFH (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-9.0-10.0(REA2)	EFH (C8-C11)	0.95 mg/Kg	1.4U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB83B211315A	6/14/2011 1:15:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	8.3 ug/Kg 1.7 ug/Kg 0.14 ug/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(RES)	ACETONE	8.0 ug/Kg	8.0U ug/Kg
DUP10-SA8N-QC-060811(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	3.9U ug/Kg
DUP10-SA8N-QC-060811(RES)	TOLUENE	0.30 ug/Kg	3.9U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	ACETONE	8.3 ug/Kg	8.3U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	TOLUENE	0.15 ug/Kg	3.9U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.3 ug/Kg	9.3U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.12 ug/Kg	4.0U ug/Kg
SL-025-SA5DN-SB-23.0-24.0(RES)	ACETONE	9.5 ug/Kg	9.5U ug/Kg
SL-025-SA5DN-SB-23.0-24.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.3U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 | Laboratory: LL

EDD Filename: DE176_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-025-SA5DN-SB-23.0-24.0(RES)	TOLUENE	0.19 ug/Kg	4.3U ug/Kg
SL-025-SA5DN-SB-4.0-5.0(RES)	ACETONE	8.4 ug/Kg	8.4U ug/Kg
SL-025-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg
SL-025-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.16 ug/Kg	3.9U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	ACETONE	9.5 ug/Kg	9.5U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.5U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	TOLUENE	0.14 ug/Kg	4.5U ug/Kg
SL-028-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.0U ug/Kg
SL-028-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.14 ug/Kg	4.0U ug/Kg
SL-051-SA5DN-SB-14.0-15.0(RES)	ACETONE	8.8 ug/Kg	8.8U ug/Kg
SL-051-SA5DN-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.0U ug/Kg
SL-051-SA5DN-SB-14.0-15.0(RES)	TOLUENE	0.14 ug/Kg	4.0U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	ACETONE	9.1 ug/Kg	9.1U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.4U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	4.4U ug/Kg
SL-076-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	3.7U ug/Kg
SL-076-SA8N-SB-4.0-5.0(RES)	TOLUENE	0.28 ug/Kg	3.7U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.1U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	TOLUENE	0.20 ug/Kg	4.1U ug/Kg
SL-106-SA8N-SB-2.5-3.5(RES)	ACETONE	8.2 ug/Kg	8.2U ug/Kg
SL-106-SA8N-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	3.8U ug/Kg
SL-106-SA8N-SB-2.5-3.5(RES)	TOLUENE	0.19 ug/Kg	3.8U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	ACETONE	27 ug/Kg	27U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.1U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	TOLUENE	0.12 ug/Kg	4.1U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	ACETONE	32 ug/Kg	32U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.0U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	TOLUENE	0.16 ug/Kg	4.0U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB16B261536	6/23/2011 3:36:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP10-SA8N-QC-060811(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	49 ug/Kg	380U ug/Kg
SL-023-SA5DN-SB-20.0-21.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	370U ug/Kg
SL-023-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	380U ug/Kg
SL-028-SA5DN-SB-11.5-12.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	370U ug/Kg
SL-051-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-7.5-8.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	380U ug/Kg

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWK16B262329	6/16/2011 11:29:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	0.061 ug/L 0.065 ug/L	EB16-SA8N-SB-060811

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA8N-SB-060811(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.069 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: DE176_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	DIETHYLENE GLYCOL	54	44	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)
SL-076-SA8N-SB-4.0-5.0MSD	ETHYLENE GLYCOL	-	56	63.00-107.00	22 (20.00)	ETHYLENE GLYCOL	
(SL-076-SA8N-SB-4.0-5.0)	Propylene glycol	-	59	63.00-107.00	23 (20.00)	Propylene glycol	

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MSD	1,3,5-TRINITROBENZENE	-	76	82.00-126.00	-	1,3,5-TRINITROBENZENE	J(all detects) UJ(all non-detects)
(SL-076-SA8N-SB-4.0-5.0)							

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	m-Terphenyl	74	-	75.00-125.00	-	m-Terphenyl	J(all detects) UJ(all non-detects)
(SL-076-SA8N-SB-4.0-5.0)							

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	EFH (C15-C20)	125	150	49.00-123.00	-	EFH (C15-C20)	J(all detects)
SL-076-SA8N-SB-4.0-5.0MSD	EFH (C21-C30)	-	158	49.00-123.00	-	EFH (C21-C30)	
(SL-076-SA8N-SB-4.0-5.0)	EFH (C30-C40)	-	240	49.00-123.00	51 (20.00)	EFH (C30-C40)	

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS	N-NITROSODIMETHYLAMINE	69	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)
(SL-076-SA8N-SB-4.0-5.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MSD (SL-076-SA8N-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	31 (30.00)	2,4-DINITROPHENOL	J(all detects)
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (SL-076-SA8N-SB-4.0-5.0)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (SL-076-SA8N-SB-4.0-5.0)	1,4-DICHLOROBENZENE	68	68	70.00-100.00	-	1,4-DICHLOROBENZENE	J(all detects) UJ(all non-detects)
	2,4,5-TRICHLOROPHENOL	76	76	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	74	72	78.00-117.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	77	77	78.00-110.00	-	2,4-DIMETHYLPHENOL	
	2,4-DINITROTOLUENE	71	-	73.00-113.00	-	2,4-DINITROTOLUENE	
	2-CHLOROPHENOL	71	71	73.00-121.00	-	2-CHLOROPHENOL	
	2-METHYLNAPHTHALENE	68	68	76.00-114.00	-	2-METHYLNAPHTHALENE	
	2-METHYLPHENOL	68	68	75.00-111.00	-	2-METHYLPHENOL	
	4-CHLORO-3-METHYLPHENOL	72	71	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-CHLOROPHENYL-PHENYLET	75	76	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	
	4-METHYLPHENOL	65	63	71.00-111.00	-	4-METHYLPHENOL	
	ACENAPHTHYLENE	79	80	81.00-110.00	-	ACENAPHTHYLENE	
	BENZYL ALCOHOL	-	66	67.00-115.00	-	BENZYL ALCOHOL	
	BIS(2-CHLOROETHOXY)METHA	-	74	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	FLUORENE	76	-	77.00-111.00	-	FLUORENE	
	HEXACHLOROBENZENE	-	76	77.00-114.00	-	HEXACHLOROBENZENE	
	N-NITROSODIPHENYLAMINE	80	79	86.00-145.00	-	N-NITROSODIPHENYLAMINE	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	ARSENIC	243	198	75.00-125.00	-	ARSENIC	J(all detects)
	BERYLLIUM	126	144	75.00-125.00	-	BERYLLIUM	
	CADMIUM	151	141	75.00-125.00	-	CADMIUM	
	CHROMIUM	160	145	75.00-125.00	-	CHROMIUM	
	COBALT	147	138	75.00-125.00	-	COBALT	
	COPPER	160	153	75.00-125.00	-	COPPER	
	LEAD	205	179	75.00-125.00	-	LEAD	
	NICKEL	183	173	75.00-125.00	-	NICKEL	
	SILVER	150	137	75.00-125.00	-	SILVER	As, Zn, No Qual, >4x
	THALLIUM	162	155	75.00-125.00	-	THALLIUM	
	VANADIUM	204	189	75.00-125.00	-	VANADIUM	
	ZINC	260	240	75.00-125.00	-	ZINC	
SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	ANTIMONY	64	62	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**

Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-076-SA8N-SB-4.0-5.0MS (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	SELENIUM	136	-	75.00-125.00	-	SELENIUM	J(all detects)
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	MOLYBDENUM	153	141	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	BARIUM	433	423	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	2284 142 1221 257 207	2490 165 1275 256 303	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM TITANIUM	No Qual, >4x
SL-076-SA8N-SB-4.0-5.0MS **SL-076-SA8N-SB-4.0-5.0MSD** (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	MANGANESE	32	12	75.00-125.00	-	MANGANESE	No Qual, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-076-SA8N-SB-4.0-5.0MS (SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5)	FLUORIDE	29	-	80.00-120.00	-	FLUORIDE	J(all detects) R(all non-detects)
SL-106-SA8N-SB-2.5-3.5MS (DUP10-SA8N-QC-060811 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	FLUORIDE Nitrate-NO3	47 74	- -	80.00-120.00 80.00-120.00	- -	FLUORIDE Nitrate-NO3	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA8N-SB-4.0-5.0DUP	MANGANESE	92	20.00	
(DUP10-SA8N-QC-060811	Zirconium	49	20.00	
SL-023-SA5DN-SB-20.0-21.0				
SL-023-SA5DN-SB-4.0-5.0				
SL-025-SA5DN-SB-23.0-24.0				J (all detects)
SL-025-SA5DN-SB-4.0-5.0				UJ (all non-detects)
SL-028-SA5DN-SB-11.5-12.5				
SL-028-SA5DN-SB-4.0-5.0				
SL-051-SA5DN-SB-14.0-15.0				
SL-051-SA5DN-SB-4.0-5.0				
SL-076-SA8N-SB-4.0-5.0				Zr, No Qual,
SL-076-SA8N-SB-7.5-8.5				OK by Difference
SL-106-SA8N-SB-2.5-3.5				
SL-109-SA8N-SB-4.0-5.0				
SL-109-SA8N-SB-9.0-10.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-076-SA8N-SB-4.0-5.0DUP	ANTIMONY	69	20.00	
(DUP10-SA8N-QC-060811	ARSENIC	23	20.00	
SL-023-SA5DN-SB-20.0-21.0	LEAD	21	20.00	
SL-023-SA5DN-SB-4.0-5.0				
SL-025-SA5DN-SB-23.0-24.0				
SL-025-SA5DN-SB-4.0-5.0				J(all detects)
SL-028-SA5DN-SB-11.5-12.5				UJ(all non-detects)
SL-028-SA5DN-SB-4.0-5.0				
SL-051-SA5DN-SB-14.0-15.0				
SL-051-SA5DN-SB-4.0-5.0				Sb, No Qual,
SL-076-SA8N-SB-4.0-5.0				OK by Difference
SL-076-SA8N-SB-7.5-8.5				
SL-106-SA8N-SB-2.5-3.5				
SL-109-SA8N-SB-4.0-5.0				
SL-109-SA8N-SB-9.0-10.0)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-076-SA8N-SB-4.0-5.0DUP (DUP10-SA8N-QC-060811 SL-023-SA5DN-SB-20.0-21.0 SL-023-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-025-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0)	MERCURY	200	20.00	No Qual OK by Difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: DE176_v1 eQAPP Name: CDM_SSFL_110509

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11655AQ241808A P11655AY241750A (EB16-SA8N-SB-060811)	Aroclor 5442	86	88	35.00-84.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J(all detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WKLCSQ260002 P0WKLCSY260034 (EB16-SA8N-SB-060811)	1-METHYLNAPHTHALENE	134	119	71.00-117.00	-	1-METHYLNAPHTHALENE	J(all detects)
	2-METHYLNAPHTHALENE	118	-	75.00-115.00	-	2-METHYLNAPHTHALENE	
	ACENAPHTHENE	129	132	74.00-109.00	-	ACENAPHTHENE	
	ACENAPHTHYLENE	132	124	70.00-110.00	-	ACENAPHTHYLENE	
	ANTHRACENE	140	130	66.00-111.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	129	129	72.00-114.00	-	BENZO(A)ANTHRACENE	
	BENZO(A)PYRENE	130	148	60.00-127.00	-	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	127	125	69.00-123.00	-	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-	136	57.00-131.00	-	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	135	138	59.00-130.00	-	BENZO(K)FLUORANTHENE	
	CHRYSENE	131	129	76.00-116.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	149	172	55.00-134.00	-	DIBENZO(A,H)ANTHRACENE	
	Diethylphthalate	137	-	57.00-134.00	-	Diethylphthalate	
	Di-n-butylphthalate	133	149	74.00-131.00	-	Di-n-butylphthalate	
	FLUORANTHENE	138	158	75.00-116.00	-	FLUORANTHENE	
	FLUORENE	157	128	75.00-114.00	-	FLUORENE	
	INDENO(1,2,3-CD)PYRENE	145	162	69.00-124.00	-	INDENO(1,2,3-CD)PYRENE	
	NAPHTHALENE	128	126	72.00-109.00	-	NAPHTHALENE	
	PHENANTHRENE	130	127	76.00-111.00	-	PHENANTHRENE	
	PYRENE	146	130	69.00-118.00	-	PYRENE	

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WLLCSQ261332 P0WLLCSY261358 (EB16-SA8N-SB-060811)	3,3'-DICHLOROBENZIDINE	127	121	49.00-111.00	-	3,3'-DICHLOROBENZIDINE	J(all detects)
	4-CHLOROANILINE	146	-	42.00-124.00	-	4-CHLOROANILINE	
	ANILINE	112	104	49.00-101.00	-	ANILINE	
	BENZIDINE	137	116	20.00-109.00	-	BENZIDINE	
P0WLLCSY261358 (EB16-SA8N-SB-060811)	2,6-DINITROTOLUENE	-	80	85.00-115.00	-	2,6-DINITROTOLUENE	J(all detects) UJ(all non-detects)
	2-NITROANILINE	-	81	83.00-116.00	-	2-NITROANILINE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11627AQ242055A P11627AY242037A (DUP10 -SA8N -QC -060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	Aroclor 5442	144	120	36.00-106.00	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11648AQ242114A (DUP10 -SA8N -QC -060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	PETN	123	-	80.00-120.00	-	PETN	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LBLCSQ261602 (DUP10 -SA8N -QC -060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	3,3'-DICHLOROBENZIDINE 4-CHLOROANILINE INDENO(1,2,3-CD)PYRENE	126 114 123	- - -	24.00-101.00 10.00-110.00 64.00-119.00	- - -	3,3'-DICHLOROBENZIDINE 4-CHLOROANILINE INDENO(1,2,3-CD)PYRENE	J(all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LBLCSQ261602	1,2-DICHLOROBENZENE	77	-	79.00-102.00	-	1,2-DICHLOROBENZENE	J(all detects) UJ(all non-detects)
(DUP10 -SA8N -QC-060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	2-NITROPHENOL	80	-	81.00-114.00	-	2-NITROPHENOL	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16726AQ220908A (DUP10 -SA8N -QC-060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	ANTIMONY	143	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB83Q211403A	1,2-DIBROMO-3-CHLOROPROP	129	-	58.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)
(DUP10 -SA8N -QC-060811 SL -023-SA5DN -SB-20.0-21.0 SL -023-SA5DN -SB-4.0-5.0 SL -025-SA5DN -SB-23.0-24.0 SL -025-SA5DN -SB-4.0-5.0 SL -028-SA5DN -SB-11.5-12.5 SL -028-SA5DN -SB-4.0-5.0 SL -051-SA5DN -SB-14.0-15.0 SL -051-SA5DN -SB-4.0-5.0 SL -076-SA8N -SB-4.0-5.0 SL -076-SA8N -SB-7.5-8.5 SL -106-SA8N -SB-2.5-3.5 SL -109-SA8N -SB-4.0-5.0 SL -109-SA8N -SB-9.0-10.0)	METHYLENE CHLORIDE	125	-	76.00-124.00	-	METHYLENE CHLORIDE	

Surrogate Outlier Report

Lab Reporting Batch ID: DE176 Laboratory: LL

EDD Filename: DE176_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-028-SA5DN-SB-11.5-12.5	N-Nitrosodimethylamine-d6	1044	50.00-150.00	All Target Analytes	No Qual, Diluted Out
SL-028-SA5DN-SB-4.0-5.0	N-Nitrosodimethylamine-d6	1071	50.00-150.00	All Target Analytes	No Qual, Diluted Out
SL-076-SA8N-SB-7.5-8.5	N-Nitrosodimethylamine-d6	151	50.00-150.00	All Target Analytes	J(all detects)

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-028-SA5DN-SB-4.0-5.0	n-Triacontane-d62	151	50.00-150.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB16-SA8N-SB-060811	Nitrobenzene-d5	138	40.00-130.00	No Affected Compounds	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
MOISTURE	11.4	11.6	2		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
N-NITROSODIMETHYLAMINE	37.4 U	19.3	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
FLUORIDE	2.5	2.6	4	50.00	No Qualifiers Applied
Nitrate-NO3	1.5	2.0	29	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
ALUMINUM	24500	24700	1	50.00	No Qualifiers Applied
BORON	4.48	4.54	1	50.00	
CALCIUM	2430	2430	0	50.00	
IRON	23200	23100	0	50.00	
LITHIUM	31.3	31.4	0	50.00	
MAGNESIUM	4360	4370	0	50.00	
MANGANESE	280	230	20	50.00	
PHOSPHORUS	238	240	1	50.00	
POTASSIUM	2160	2150	0	50.00	
SODIUM	122	134	9	50.00	
STRONTIUM	16.8	16.9	1	50.00	
TIN	2.85	2.82	1	50.00	
TITANIUM	1210	1190	2	50.00	
Zirconium	3.47	3.14	10	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.275	0.201	31	50.00	No Qualifiers Applied
ARSENIC	9.52	11.5	19	50.00	
BARIUM	119	165	32	50.00	
BERYLLIUM	0.872	1.07	20	50.00	
CADMIUM	0.0781	0.113	37	50.00	
CHROMIUM	18.8	22.3	17	50.00	
COBALT	6.63	8.70	27	50.00	
COPPER	10.2	12.6	21	50.00	
LEAD	7.66	9.71	24	50.00	
MOLYBDENUM	1.18	1.45	21	50.00	
NICKEL	16.0	20.0	22	50.00	
SELENIUM	0.127	0.128	1	50.00	
SILVER	0.0697	0.0883	24	50.00	
THALLIUM	0.333	0.406	20	50.00	
VANADIUM	40.1	49.0	20	50.00	
ZINC	62.6	85.1	30	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.51	0.48	6	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
MERCURY	0.0242	0.0320	28	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (mg/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
EFH (C21-C30)	2.1	2.5	17	50.00	No Qualifiers Applied
EFH (C30-C40)	4.8	5.4	12	50.00	
EFH (C8-C11)	1.2	0.99	19	50.00	
EFH (C15-C20)	1.4 U	0.54	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-076-SA8N-SB-4.0-5.0	Concentration (ug/Kg) DUP10-SA8N-QC-060811	Sample RPD	eQAPP RPD	Flag
AROCLOR 1260	3.4	2.4	34	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: PrepDE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
METHYLENE CHLORIDE	1.3	1.6	21	50.00	No Qualifiers Applied
TOLUENE	0.28	0.30	7	50.00	
ACETONE	7.5 U	8.0	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
NAPHTHALENE	0.94	1.2	24	50.00	No Qualifiers Applied

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
BIS(2-ETHYLHEXYL)PHTHALATE	22	49	76	50.00	J(all detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
PH	6.90	6.87	0	50.00	No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA8N-SB-060811	LEAD	J	0.000066	0.0010	PQL	mg/L	J (all detects)

Method: 7470A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA8N-SB-060811	MERCURY	J	0.000060	0.00020	PQL	mg/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA8N-SB-060811	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.069	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.30	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.71	1.0	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	N-NITROSODIMETHYLAMINE	J	19.3	37.5	PQL	ng/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	34.3	37.4	PQL	ng/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	N-NITROSODIMETHYLAMINE	J	30.4	37.6	PQL	ng/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	29.0	37.5	PQL	ng/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	N-NITROSODIMETHYLAMINE	J	22.5	38.2	PQL	ng/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	N-NITROSODIMETHYLAMINE	J	31.0	38.1	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-023-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	BORON	J	4.54	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	2.82	11.0	PQL	mg/Kg	
	Zirconium	J	3.14	5.49	PQL	mg/Kg	
SL-023-SA5DN-SB-20.0-21.0	TIN	J	2.48	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.18	5.33	PQL	mg/Kg	
SL-023-SA5DN-SB-4.0-5.0	TIN	J	2.71	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.26	5.67	PQL	mg/Kg	
SL-025-SA5DN-SB-23.0-24.0	BORON	J	3.75	5.34	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	10.7	PQL	mg/Kg	
	Zirconium	J	2.32	5.34	PQL	mg/Kg	
SL-025-SA5DN-SB-4.0-5.0	TIN	J	2.59	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.61	5.59	PQL	mg/Kg	
SL-028-SA5DN-SB-11.5-12.5	TIN	J	2.45	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.69	5.44	PQL	mg/Kg	
SL-028-SA5DN-SB-4.0-5.0	TIN	J	2.84	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.07	5.73	PQL	mg/Kg	
SL-051-SA5DN-SB-14.0-15.0	TIN	J	2.50	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.85	5.54	PQL	mg/Kg	
SL-051-SA5DN-SB-4.0-5.0	TIN	J	2.66	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.18	5.67	PQL	mg/Kg	
SL-076-SA8N-SB-4.0-5.0	BORON	J	4.48	5.53	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	11.1	PQL	mg/Kg	
	Zirconium	J	3.47	5.53	PQL	mg/Kg	
SL-076-SA8N-SB-7.5-8.5	BORON	J	3.81	5.59	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	11.2	PQL	mg/Kg	
	Zirconium	J	3.24	5.59	PQL	mg/Kg	
SL-106-SA8N-SB-2.5-3.5	BORON	J	4.39	5.61	PQL	mg/Kg	J (all detects)
	TIN	J	3.19	11.2	PQL	mg/Kg	
	Zirconium	J	2.94	5.61	PQL	mg/Kg	
SL-109-SA8N-SB-4.0-5.0	BORON	J	5.38	5.73	PQL	mg/Kg	J (all detects)
	SODIUM	J	85.2	115	PQL	mg/Kg	
	TIN	J	3.03	11.5	PQL	mg/Kg	
	Zirconium	J	3.42	5.73	PQL	mg/Kg	
SL-109-SA8N-SB-9.0-10.0	BORON	J	5.53	5.72	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	11.4	PQL	mg/Kg	
	Zirconium	J	3.38	5.72	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	ANTIMONY	J	0.201	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.444	PQL	mg/Kg	
	SILVER	J	0.0883	0.111	PQL	mg/Kg	
SL-023-SA5DN-SB-20.0-21.0	SILVER	J	0.104	0.107	PQL	mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	SELENIUM	J	0.119	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0545	0.110	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5DN-SB-23.0-24.0	ANTIMONY CADMIUM SILVER	J J J	0.140 0.0864 0.0450	0.218 0.109 0.109	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.0811 0.0468	0.448 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	SELENIUM SILVER	J J	0.130 0.0501	0.431 0.108	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.247 0.108	0.468 0.117	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	SILVER	J	0.0477	0.112	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	SELENIUM SILVER	J J	0.119 0.0596	0.454 0.113	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	CADMIUM SELENIUM SILVER	J J J	0.0781 0.127 0.0697	0.113 0.451 0.113	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	ANTIMONY CADMIUM SELENIUM	J J J	0.169 0.0512 0.273	0.228 0.114 0.456	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	ANTIMONY CADMIUM SILVER	J J J	0.177 0.0653 0.0210	0.231 0.115 0.115	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	ANTIMONY SILVER	J J	0.214 0.0258	0.229 0.115	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	ANTIMONY SILVER	J J	0.216 0.0633	0.222 0.111	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.73	1.2	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.77	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	MERCURY	J	0.0320	0.110	PQL	mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	MERCURY	J	0.0194	0.110	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	MERCURY	J	0.0085	0.114	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	MERCURY	J	0.0242	0.107	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	EFH (C15-C20) EFH (C8-C11)	J J	0.54 0.99	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-023-SA5DN-SB-20.0-21.0	EFH (C30-C40) EFH (C8-C11)	J J	0.70 1.2	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	EFH (C21-C30) EFH (C8-C11)	J J	0.47 1.3	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-025-SA5DN-SB-23.0-24.0	EFH (C30-C40)	J	0.49	1.3	PQL	mg/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	EFH (C30-C40) EFH (C8-C11)	J J	1.2 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	EFH (C8-C11)	J	1.1	1.3	PQL	mg/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	EFH (C15-C20) EFH (C8-C11)	J J	0.57 0.99	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	EFH (C15-C20) EFH (C8-C11)	J J	0.50 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	EFH (C15-C20) EFH (C8-C11)	J J	0.55 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	EFH (C8-C11)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	EFH (C15-C20) EFH (C8-C11)	J J	0.49 1.1	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	EFH (C8-C11)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	EFH (C8-C11)	J	1.2	1.4	PQL	mg/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	EFH (C8-C11)	J	0.95	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA5DN-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	0.58 0.54	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.30	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-023-SA5DN-SB-20.0-21.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.12	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-025-SA5DN-SB-23.0-24.0	METHYLENE CHLORIDE TOLUENE	J J	1.8 0.19	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-025-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.16	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.14	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-028-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.14	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-051-SA5DN-SB-14.0-15.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.14	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.15	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.3 0.28	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.20	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.19	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	J J J	2.5 1.0 0.12	8.1 4.1 4.1	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	J J J	2.5 1.7 0.16	8.1 4.0 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	BIS(2-ETHYLHEXYL)PHTHALATE	J	49	380	PQL	ug/Kg	J (all detects)
SL-023-SA5DN-SB-20.0-21.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	370	PQL	ug/Kg	J (all detects)
SL-051-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-109-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)
SL-109-SA8N-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	380	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE176 **Laboratory: LL**

EDD Filename: DE176_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP10-SA8N-QC-060811	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
SL-023-SA5DN-SB-4.0-5.0	Butylbenzylphthalate	J	10	20	PQL	ug/Kg	J (all detects)
SL-028-SA5DN-SB-11.5-12.5	BENZO(A)ANTHRACENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.79	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.80	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	12	20	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-076-SA8N-SB-4.0-5.0	NAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	J (all detects)
SL-076-SA8N-SB-7.5-8.5	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
SL-106-SA8N-SB-2.5-3.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	J (all detects)

Enclosure II

Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
TB-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B for Volatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Analysis Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
VBLKB83	6/14/11	Acetone Methylene chloride Toluene	8.3 ug/Kg 1.7 ug/Kg 0.14 ug/Kg	All soil samples in SDG DE176

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.3 ug/Kg 1.3 ug/Kg 0.12 ug/Kg	9.3U ug/Kg 4.0U ug/Kg 4.0U ug/Kg
SL-023-SA5DN-SB-20.0-21.0	Acetone Methylene chloride Toluene	8.3 ug/Kg 1.5 ug/Kg 0.15 ug/Kg	8.3U ug/Kg 3.9U ug/Kg 3.9U ug/Kg
SL-025-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	8.4 ug/Kg 1.5 ug/Kg 0.16 ug/Kg	8.4U ug/Kg 3.9U ug/Kg 3.9U ug/Kg
SL-025-SA5DN-SB-23.0-24.0	Acetone Methylene chloride Toluene	9.5 ug/Kg 1.8 ug/Kg 0.19 ug/Kg	9.5U ug/Kg 4.3U ug/Kg 4.3U ug/Kg
SL-028-SA5DN-SB-4.0-5.0	Methylene chloride Toluene	1.5 ug/Kg 0.14 ug/Kg	4.0U ug/Kg 4.0U ug/Kg
SL-028-SA5DN-SB-11.5-12.5	Acetone Methylene chloride Toluene	9.5 ug/Kg 1.7 ug/Kg 0.14 ug/Kg	9.5U ug/Kg 4.5U ug/Kg 4.5U ug/Kg
SL-051-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.1 ug/Kg 1.4 ug/Kg 0.15 ug/Kg	9.1U ug/Kg 4.4U ug/Kg 4.4U ug/Kg
SL-051-SA5DN-SB-14.0-15.0	Acetone Methylene chloride Toluene	8.8 ug/Kg 1.6 ug/Kg 0.14 ug/Kg	8.8U ug/Kg 4.0U ug/Kg 4.0U ug/Kg
SL-076-SA8N-SB-4.0-5.0	Methylene chloride Toluene	1.3 ug/Kg 0.28 ug/Kg	3.7U ug/Kg 3.7U ug/Kg
SL-076-SA8N-SB-7.5-8.5	Acetone Methylene chloride Toluene	11 ug/Kg 1.4 ug/Kg 0.20 ug/Kg	11U ug/Kg 4.1U ug/Kg 4.1U ug/Kg

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-106-SA8N-SB-2.5-3.5	Acetone Methylene chloride Toluene	8.2 ug/Kg 1.6 ug/Kg 0.19 ug/Kg	8.2U ug/Kg 3.8U ug/Kg 3.8U ug/Kg
SL-109-SA8N-SB-4.0-5.0	Acetone Methylene chloride Toluene	27 ug/Kg 1.0 ug/Kg 0.12 ug/Kg	27U ug/Kg 4.1U ug/Kg 4.1U ug/Kg
SL-109-SA8N-SB-9.0-10.0	Acetone Methylene chloride Toluene	32 ug/Kg 1.7 ug/Kg 0.16 ug/Kg	32U ug/Kg 4.0U ug/Kg 4.0U ug/Kg
DUP10-SA8N-QC-060811	Acetone Methylene chloride Toluene	8.0 ug/Kg 1.6 ug/Kg 0.30 ug/Kg	8.0U ug/Kg 3.9U ug/Kg 3.9U ug/Kg

Sample TB-060811 was identified as a trip blank. No volatile contaminants were found.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No volatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
LCS B83 (All soil samples in SDG DE176)	Methylene chloride 1,2-Dibromo-3-chloropropane	125 (76-124) 129 (58-120)	- -	- -	J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No volatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Methylene chloride	1.3	1.6	21 (≤50)	-	-
Toluene	0.28	0.30	7 (≤50)	-	-

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Acetone	7.5U	8.0	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	Methylene chloride 1,2-Dibromo-3-chloropropane	J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 TB-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	Acetone	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.3U ug/Kg 4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Acetone Methylene chloride Toluene	8.3U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B
DE176	SL-025-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	8.4U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-025-SA5DN-SB-23.0-24.0	Acetone Methylene chloride Toluene	9.5U ug/Kg 4.3U ug/Kg 4.3U ug/Kg	A	B
DE176	SL-028-SA5DN-SB-4.0-5.0	Methylene chloride Toluene	4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Acetone Methylene chloride Toluene	9.5U ug/Kg 4.5U ug/Kg 4.5U ug/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Acetone Methylene chloride Toluene	9.1U ug/Kg 4.4U ug/Kg 4.4U ug/Kg	A	B
DE176	SL-051-SA5DN-SB-14.0-15.0	Acetone Methylene chloride Toluene	8.8U ug/Kg 4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	SL-076-SA8N-SB-4.0-5.0	Methylene chloride Toluene	3.7U ug/Kg 3.7U ug/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Acetone Methylene chloride Toluene	11U ug/Kg 4.1U ug/Kg 4.1U ug/Kg	A	B
DE176	SL-106-SA8N-SB-2.5-3.5	Acetone Methylene chloride Toluene	8.2U ug/Kg 3.8U ug/Kg 3.8U ug/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Acetone Methylene chloride Toluene	27U ug/Kg 4.1U ug/Kg 4.1U ug/Kg	A	B
DE176	SL-109-SA8N-SB-9.0-10.0	Acetone Methylene chloride Toluene	32U ug/Kg 4.0U ug/Kg 4.0U ug/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Acetone Methylene chloride Toluene	8.0U ug/Kg 3.9U ug/Kg 3.9U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G1a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Volatiles (EPA SW 846 Method 8260B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≥ 75
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9 + 14
XVII.	Field blanks	ND	TB = 15 EB = 16

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	VBLKB83	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	VBLK107	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	TB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	EB16-SA8N-SB-060811 W	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MS	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	SL-076-SA8N-SB-4.0-5.0MSD	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

DC #: 202776/a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) $\leq$ 25% and relative response factors (RRF) $\geq$ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26277G/a

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y/N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

(B)

Blank analysis date: 6/14/11
Conc. units: ug/kg
Associated Samples: All Soils

Compound	Blank ID	Sample Identification								
	VBLKB83	10X/5X	1	2	3	4	5	6	7	8
F	8.3	83	9.3/4	8.3/4	8.4/4	9.5/4	-	9.5/4	9.1/4	8.8/4
E	1.7	17	1.3/4.0U	1.5/3.9U	1.5/3.9U	1.8/4.3U	1.5/4.0U	1.7/4.5U	1.4/4.4U	1.6/4.0U
CC	0.14	0.70	0.12/4.0U	0.15/3.9U	0.16/3.9U	0.19/4.3U	0.14/4.0U	0.14/4.5U	0.15/4.4U	0.14/4.0U
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
		9	10	11	12	13	14			
		-	11/4	8.2/4	27/4	32/4	8.0/4			
		1.3/3.7U	1.4/4.1U	1.6/3.8U	1.0/4.1U	1.7/4.0U	1.6/3.9U			
		0.28/3.7U	0.20/4.1U	0.19/3.8U	0.12/4.1U	0.16/4.0U	0.30/3.9U			
CRQL										

All results were qualified using the criteria stated below except those circled.

Note: Common contaminants such as Methylene chloride, Acetone, 2-Butanone, Carbon disulfide and TICs that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277G/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Was a LCS required?
Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS B83	E	125 (76-124)	( )	( )	All soils	J/Pdet (L)
			MM	129 (58-120	( )	( )	↓	↓ ↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC __ HPLC

Y N N/A Were field duplicate pairs identified in this SDG?

Y N N/A Were target compounds detected in the field duplicate pairs?

(FD)

Compound	Concentration (ug/kg)		%RPD Limit ≤ 50	Qualification Parent only / All Samples
	9	14		
E	1.3	1.6	21	
CC	0.28	0.30	7	
F	7.54	8.0	200	J/UJ/A

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	C (1st internal standard)	0.3589	0.3589	0.3517	0.3517	7	7
			EE (2nd internal standard)	1.7255	1.7255	1.5871	1.5871	8	8
			JJJ (3rd internal standard)	1.4546	1.4546	1.3695	1.3695	6	6
			(4th internal standard)						
2	ICV2	4/21/11	C (1st internal standard)	0.3956	0.3956	0.4093	0.4093	4	4
			EE (2nd internal standard)	1.9473	1.9473	1.9438	1.9438	2	2
			JJJ (3rd internal standard)	1.6715	1.6715	1.6569	1.6569	3	3
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 12:08	6/14/11	C (1st internal standard)	0.3517	0.3242	0.3242	8	8
			EE (2nd internal standard)	1.5871	1.6998	1.6998	7	7
			JJJ (3rd internal standard)	1.3695	1.4229	1.4229	4	4
			(4th internal standard)					
2	CCV 07:24	6/14/11	C (1st internal standard)	0.4093	0.4022	0.4022	2	2
			EE (2nd internal standard)	1.9438	2.0373	2.0373	5	5
			JJJ (3rd internal standard)	1.6569	1.6867	1.6867	2	2
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET

Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	52.446	105	105	0
1,2-Dichloroethane-d4	↓	55.675	111	111	↓
Toluene-d8		49.233	98	98	
Bromofluorobenzene		47.800	96	96	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26277G1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 17 + 18

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	16.89	16.89	ND	19.2	19.3	114	114	115	115	1	1
Trichloroethene	↓	↓	↓	16.76	16.64	99	99	99	99	1	1
Benzene	↓	↓	↓	17.64	17.65	104	104	105	105	0	0
Toluene	↓	↓	0.25	16.76	16.95	98	98	100	100	1	1
Chlorobenzene	↓	↓	ND	16.16	16.22	96	96	97	97	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 22174J2

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: lcs 18483

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	NA	22.59	NA	113	113				
Trichloroethene	↓	↓	21.12	↓	106	106				
Benzene			21.94		110	110				
Toluene			21.42		107	107				
Chlorobenzene			21.26		106	106	NA			

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G/a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, CC.

Conc. = $\frac{(1608)(50)(5)}{(75238)(0.8572)(5.74)(0.88)}$

=

0.123 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
TB-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260B using Selected Ion Monitoring (SIM) for 1,4-Dioxane.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for 1,4-Dioxane.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 25.0% for 1,4-Dioxane.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for 1,4-Dioxane.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No 1,4-dioxane was found in the method blanks.

Sample TB-060811 was identified as a trip blank. No 1,4-dioxane was found.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No 1,4-dioxane was found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No 1,4-dioxane was detected in any of the samples.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 TB-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G1b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/7/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EF
2nd Reviewer: CF

METHOD: GC/MS 1,4-Dioxane (EPA SW 846 Method 8260B-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 2x
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 9 a 14
XVII.	Field blanks	ND	TB = 15 EB = 16

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	VBLKE52	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	VBLKE54	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23	VBLKE50	33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	TB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	EB16-SA8N-SB-060811 W	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MS	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	SL-076-SA8N-SB-4.0-5.0MSD	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 26277G1b

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the BFB performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) ≥ 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed at least once every 12 hours for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per analytical batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds of the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?		✓		
XII. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XIII. Tentatively identified compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL	11/1/10	1,4-Dioxane (1st internal standard)	1.3359	1.3359	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 7:04	6/11/11	1,4-Dioxane (1st internal standard)	1.3396	1.4220	1.4220	6	6
			(2nd internal standard)					
			(3rd internal standard)					
	CCV 13:30	6/13/11	↓ (4th internal standard)	↓	1.4330	1.4330	7	7
2			(1st internal standard)					
	CCV 8:12	6/09/11	↓ (2nd internal standard)	↓	1.2253	1.2253	7	7
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	9.539	95	95	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

RPD = | MSC - MSC | * 2/(MSC + MSDC)

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 17 + 18

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~1,1-Dichloroethene~~ 1,4 Dioxane	102.46	102.46	NR	97.93	106.41	96	96	100	100	8	8
Trichloroethene											
Benzene											
Toluene											
Chlorobenzene											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: LCS E52 Las ID

Compound	Spike Added (ng/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane										
1,1-Dichloroethene	125	125	133.52	135.23	107	107	108	108	1	1
Trichloroethene										
Benzene										
Toluene										
Chlorobenzene										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
RRF	=	Relative response factor of the calibration standard.
V_o	=	Volume or weight of sample pruged in milliliters (ml) or grams (g).
Df	=	Dilution factor.
%S	=	Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____ , _____:

Conc. = ( ) ( ) ( ) / ( ) ( ) ( ) ( )

=

ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and one water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKB162	6/13/11	Bis(2-ethylhexyl)phthalate	19 ug/Kg	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	25 ug/Kg	380U ug/Kg
SL-023-SA5DN-SB-20.0-21.0	Bis(2-ethylhexyl)phthalate	24 ug/Kg	370U ug/Kg
SL-028-SA5DN-SB-11.5-12.5	Bis(2-ethylhexyl)phthalate	25 ug/Kg	370U ug/Kg
SL-051-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	24 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	22 ug/Kg	370U ug/Kg
SL-076-SA8N-SB-7.5-8.5	Bis(2-ethylhexyl)phthalate	21 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	19 ug/Kg	380U ug/Kg
SL-109-SA8N-SB-9.0-10.0	Bis(2-ethylhexyl)phthalate	25 ug/Kg	380U ug/Kg
DUP10-SA8N-QC-060811	Bis(2-ethylhexyl)phthalate	49 ug/Kg	380U ug/Kg

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No semivolatile contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	2-Chlorophenol	71 (73-121)	71 (73-121)	-	J (all detects)	A
	1,4-Dichlorobenzene	68 (70-100)	68 (70-100)	-	UJ (all non-detects)	
	Benzyl alcohol	-	66 (67-115)	-		
	2-Methylphenol	68 (75-111)	68 (75-111)	-		
	4-Methylphenol	65 (71-111)	63 (71-111)	-		
	2,4-Dimethylphenol	77 (78-110)	77 (78-110)	-		
	bis(2-Chloroethoxy)methane	-	74 (75-104)	-		
	2,4-Dichlorophenol	74 (78-117)	72 (78-117)	-		
	4-Chloro-3-methylphenol	72 (76-110)	71 (76-110)	-		
	2-Methylnaphthalene	68 (76-114)	68 (76-114)	-		
	2,4,5-Trichlorophenol	76 (78-109)	76 (78-109)	-		
	Acenaphthylene	79 (81-110)	80 (81-110)	-		
	2,4-Dinitrotoluene	71 (73-113)	-	-		
	Fluorene	76 (77-111)	-	-		
	4-Chlorophenyl-phenylether	75 (80-109)	76 (80-109)	-		
	N-Nitrosodiphenylamine	80 (86-145)	79 (86-145)	-		
	Hexachlorobenzene	-	76 (77-114)	-		
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	2,4-Dinitrophenol	-	-	31 (≤30)	J (all detects)	A
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	Benzidine	0 (35-141)	0 (35-141)	-	J (all detects) R (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
160WLLCS/D (All water samples in SDG DE176)	Aniline	112 (49-101)	104 (49-101)	-	J (all detects)	P
	4-Chloroaniline	146 (42-124)	-	-	J (all detects)	
	3,3'-Dichlorobenzidine	127 (49-111)	121 (49-111)	-	J (all detects)	
	Benzidine	137 (34-117)	-	-	J (all detects)	
160WLLCS/D (All water samples in SDG DE176)	2-Nitroaniline	-	81 (83-116)	-	J (all detects)	P
				-	UJ (all non-detects)	
	2,6-Dinitrotoluene	-	80 (85-115)		J (all detects) UJ (all non-detects)	

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
162LBLCS (All soil samples in SDG DE176)	1,2-Dichlorobenzene	77 (79-102)	-	-	J (all detects) UJ (all non-detects)	P
	2-Nitrophenol	80 (81-114)	-	-	J (all detects) UJ (all non-detects)	
162LBLCS (All soil samples in SDG DE176)	4-Chloroaniline	114 (10-110)	-	-	J (all detects)	P
	3,3'-Dichlorobenzidine	126 (24-101)	-	-	J (all detects)	
	Indeno(1,2,3-cd)pyrene	123 (64-119)	-	-	J (all detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Bis(2-ethylhexyl)phthalate	22	49	76 (≤50)	J (all detects)	A

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	2-Chlorophenol 1,4-Dichlorobenzene Benzyl alcohol 2-Methylphenol 4-Methylphenol 2,4-Dimethylphenol bis(2-Chloroethoxy)methane 2,4-Dichlorophenol 4-Chloro-3-methylphenol 2-Methylnaphthalene 2,4,5-Trichlorophenol Acenaphthylene 2,4-Dinitrotoluene Fluorene 4-Chlorophenyl-phenylether N-Nitrosodiphenylamine Hexachlorobenzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	2,4-Dinitrophenol	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	Benzidine	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	EB16-SA8N-SB-060811	Aniline 4-Chloroaniline 3,3'-Dichlorobenzidine Benzidine	J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	EB16-SA8N-SB-060811	2-Nitroaniline 2,6-Dinitrotoluene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	1,2-Dichlorobenzene 2-Nitrophenol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	4-Chloroaniline 3,3'-Dichlorobenzidine Indeno(1,2,3-cd)pyrene	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	Bis(2-ethylhexyl)phthalate	J (all detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-076-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	370U ug/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	SL-109-SA8N-SB-9.0-10.0	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Bis(2-ethylhexyl)phthalate	380U ug/Kg	A	B

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G2a **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30, r²
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9, 14
XVII.	Field blanks	ND	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	SBLKLB162	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	SBLKWL160	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 20277G2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓	✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓	✓		
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 2627G2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. [illegible]				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. [illegible]				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. [illegible]				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. [illegible]				
System performance was found to be acceptable.	✓			
XV. [illegible]				
Overall assessment of data was found to be acceptable.	✓			
XVI. [illegible]				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. [illegible]				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 27762a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

(B)

Blank extraction date: 6/13/11 **Blank analysis date:** 6/23/11
Conc. units: ug/kg Associated Samples: 1, 2, 6, 7, 9, 10, 12 → 14

Compound	Blank ID	Sample Identification							
	SBLKB162	1	2	6	7	9	10	12	13
EEE	19	25/380U	24/370U	25/370U	24/370U	22/370U	21/380U	19/380U	25/380U
			14						
↓	↓		49/380U						

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277G2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.
(Y) N N/A Was a MS/MSD analyzed every 20 samples of each matrix?
Y (N) N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

(Q)

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		16 + 17	see following pages		( )	( )	9	all J/UJ/A
				( )	( )	( )	except	HH = J/Adet
				( )	( )	( )		SSS = J/R/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE176
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

16 of 17

UNSPK: 6310775 MS: 6310776 MSD: 6310777 Analyte	Batch: 11162SLB026 (Sample number(s): 6310767-6310777, 6310779-6310783)								
	Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits
N-Nitrosodimethylamine	1661.13	N.D.	1149.66	1151.3	69	70	47-116	0	30
Phenol	1661.13	N.D.	1123.1	1153.15	68	70	58-126	3	30
Aniline	1661.13	N.D.	867.62	806.55	52	49	35-95	7	30
bis(2-Chloroethyl)ether	1661.13	N.D.	1137.89	1140.13	69	69	60-116	0	30
2-Chlorophenol	1661.13	N.D.	1172.62	1171.57	71 *	71 *	73-121	0	30
1,3-Dichlorobenzene	1661.13	N.D.	1117.01	1144.8	67	69	63-109	2	30
1,4-Dichlorobenzene	1661.13	N.D.	1121.59	1118.24	68 *	68 *	70-100	0	30
Benzyl alcohol	1661.13	N.D.	1118.48	1086.	67	66 *	67-115	3	30
1,2-Dichlorobenzene	1661.13	N.D.	1121.69	1167.07	68	71	66-108	4	30
2-Methylphenol	1661.13	N.D.	1136.94	1117.51	68 *	68 *	75-111	2	30
bis(2-Chloroisopropyl)ether	1661.13	N.D.	1158.91	1137.88	70	69	55-142	2	30
4-Methylphenol	1661.13	N.D.	1086.49	1040.03	65 *	63 *	71-111	4	30
N-Nitroso-di-n-propylamine	1661.13	N.D.	1105.67	1098.6	67	67	60-116	1	30
Hexachloroethane	1661.13	N.D.	1147.26	1154.66	69	70	57-109	1	30
Nitrobenzene	1661.13	N.D.	1299.85	1301.89	78	79	72-106	0	30
Isophorone	1661.13	N.D.	1233.22	1232.95	74	75	73-102	0	30
2-Nitrophenol	1661.13	N.D.	1255.18	1234.9	76	75	74-115	2	30
2,4-Dimethylphenol	1661.13	N.D.	1275.77	1268.95	77 *	77 *	78-110	1	30
Benzoic acid	1661.13	N.D.	1098.4	1104.49	66	67	10-173	1	30
3,5-Dimethylphenol	1661.13	N.D.	1657.75	1627.54	100	99.	70-130	2	30
bis(2-Chloroethoxy)methane	1661.13	N.D.	1243.05	1217.93	75	74 *	75-104	2	30
2,4-Dichlorophenol	1661.13	N.D.	1224.21	1181.61	74 *	72 *	78-117	4	30
1,2,4-Trichlorobenzene	1661.13	N.D.	1260.82	1270.08	76	77	72-115	1	30
Naphthalene	1661.13	N.D.	1268.19	1251.04	76	76	72-116	1	30
4-Chloroaniline	1661.13	N.D.	838.09	834.99	50	51	23-95	0	30
Hexachlorobutadiene	1661.13	N.D.	1278.62	1265.5	77	77	62-120	1	30
4-Chloro-3-methylphenol	1661.13	N.D.	1202.48	1179.35	72 *	71 *	76-110	2	30
2-Methylnaphthalene	1661.13	N.D.	1136.38	1127.62	68 *	68 *	76-114	1	30
1-Methylnaphthalene	1661.13	N.D.	1240.09	1202.72	75	73	73-112	3	30
Hexachlorocyclopentadiene	3322.26	N.D.	2380.51	2306.53	72	70	10-153	3	30
2,4,6-Trichlorophenol	1661.13	N.D.	1294.81	1294.07	78	78	77-115	0	30
2,4,5-Trichlorophenol	1661.13	N.D.	1266.99	1262.37	76 *	76 *	78-109	0	30
2-Chloronaphthalene	1661.13	N.D.	1026.71	1045.42	62	63	50-141	2	30
2-Nitroaniline	1661.13	N.D.	1284.22	1294.47	77	78	67-125	1	30
Dimethylphthalate	1661.13	N.D.	1238.51	1239.43	75	75	64-118	0	30
2,6-Dinitrotoluene	1661.13	N.D.	1236.5	1289.36	74	78	69-123	4	30
Acenaphthylene	1661.13	N.D.	1318.86	1324.23	79 *	80 *	81-110	0	30
3-Nitroaniline	1661.13	N.D.	1133.64	1155.23	68	70	59-122	2	30
Acenaphthene	1661.13	N.D.	1285.45	1287.35	77	78	75-115	0	30
2,4-Dinitrophenol	3322.26	N.D.	1581.18	1157.47	48	35	20-143	31 *	30
4-Nitrophenol	1661.13	N.D.	1084.01	1208.46	65	73	54-113	11	30
2,4-Dinitrotoluene	1661.13	N.D.	1172.85	1264.89	71 *	77	73-113	8	30

Results are being reported on an as received basis.

Lancaster Laboratories

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: DE176
Matrix: SOLID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 6310775 MS: 6310776 MSD: 6310777 Analyte	Batch: **11162SLB026** (Sample number(s): 6310767-6310777, 6310779-6310783)								
	Spike Added ug/kg	Unspiked Conc ug/kg	MS Conc ug/kg	MSD Conc ug/kg	MS %Rec	MSD %Rec	%Rec Limits	%RPD	%RPD Limits
Dibenzofuran	1661.13	N.D.	1278.65	1273.66	77	77	71-112	0	30
Diethylphthalate	1661.13	N.D.	1247.2	1176.16	75	71	66-118	6	30
Fluorene	1661.13	N.D.	1254.98	1268.09	76 *	77	77-111	1	30
4-Chlorophenyl-phenylether	1661.13	N.D.	1237.55	1251.14	75 *	76 *	80-109	1	30
4-Nitroaniline	1661.13	N.D.	897.75	893.99	54	54	52-112	0	30
4,6-Dinitro-2-methylphenol	1661.13	N.D.	982.31	820.7	59	50	24-116	18	30
N-Nitrosodiphenylamine	1661.13	N.D.	1327.26	1309.6	80 *	79 *	86-145	1	30
1,2-Diphenylhydrazine	1661.13	N.D.	1393.81	1352.97	84	82	71-129	3	30
4-Bromophenyl-phenylether	1661.13	N.D.	1244.39	1222.96	75	74	67-129	2	30
Hexachlorobenzene	1661.13	N.D.	1275.25	1253.86	77	76 *	77-114	2	30
Pentachlorophenol	1661.13	N.D.	1101.94	1163.69	66	71	28-127	5	30
Phenanthrene	1661.13	N.D.	1255.88	1258.2	76	76	65-125	0	30
Anthracene	1661.13	N.D.	1282.43	1276.75	77	77	75-115	0	30
Carbazole	1661.13	N.D.	1235.03	1284.87	74	78	64-120	4	30
Di-n-butylphthalate	1661.13	N.D.	1265.72	1192.51	76	72	67-123	6	30
Fluoranthene	1661.13	N.D.	1207.58	1274.06	73	77	73-112	5	30
Benzidine	8305.65	N.D.	N.D.	N.D.	0 *	0 *	35-141	0	30
Pyrene	1661.13	N.D.	1306.62	1289.65	79	78	74-126	1	30
Butylbenzylphthalate	1661.13	N.D.	1417.95	1320.65	85	80	73-134	7	30
bis(2-Ethylhexyl)phthalate	1661.13	19.32	1493.06	1347.33	89	80	63-122	10	30
3,3'-Dichlorobenzidine	1661.13	N.D.	980.35	949.9	59	58	16-119	3	30
Benzo(a)anthracene	1661.13	N.D.	1298.74	1285.18	78	78	65-122	1	30
Chrysene	1661.13	N.D.	1339.89	1336.14	81	81	62-128	0	30
Di-n-octylphthalate	1661.13	N.D.	1200.74	1125.2	72	68	56-126	6	30
Benzo(b)fluoranthene	1661.13	N.D.	1131.52	1113.05	68	67	59-125	2	30
Benzo(k)fluoranthene	1661.13	N.D.	1128.13	1107.11	68	67	56-132	2	30
Benzo(a)pyrene	1661.13	N.D.	1172.5	1151.01	71	70	57-126	2	30
Indeno(1,2,3-cd)pyrene	1661.13	N.D.	1301.55	1328.19	78	80	61-126	2	30
Dibenz(a,h)anthracene	1661.13	N.D.	1324.36	1315.03	80	80	65-125	1	30
Benzo(g,h,i)perylene	1661.13	N.D.	1264.31	1314.87	76	80	59-127	4	30

Results are being reported on an as received basis.

LDC #: 26277G2g

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?
Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		160WLLCS/D	NNN	112 (49-101)	104 (49-101)	( )	All waters	J/Pdet (L)
			T	146 (42-124)	( )	( )		J/UJ/P
			BB	( )	81 (83-116)	( )		J/Pdet
			SSS	137 (34-117)	( )	( )		J/UJ/P
			BBB	127 (49-111)	121 (49-111)	( )		
			EE	( )	80 (85-115)	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
		162LBLCS	F	77 (79-102)	( )	( )	All soils	J/UJ/P (L)
			N	80 (81-114)	( )	( )		J/Pdet
			T	114 (10-110)	( )	( )		
			BBB	126 (24-101)	( )	( )		
			JJJ	123 (64-119)	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26277G2c

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

(FB)

Compound	Concentration (ug/kg)		RPD (≤ 50)
	9	14	
EEE	22	49	76 J/Adv

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277G04

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 6 of 7
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/20/11	Phenol (1st internal standard)	2.878	2.878	2.803	2.803	7	7
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.520	0.520	0.518	0.518	3	3
			~~Fluorene~~ 2-Nitroaniline (3rd internal standard)	0.423	0.423	0.401	0.401	8	8
			Pentachlorophenol (4th internal standard)	0.148	0.148	0.144	0.144	7	7
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.833	0.833	0.777	0.777	9	9
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.845	1.845	1.572	1.572	21	21
2	ICAL	6/22/11	Phenol (1st internal standard)	2.410	2.40	2.405	2.405	6	6
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.381	0.381	0.385	0.385	4	4
			~~Fluorene~~ 2-Nitroaniline (3rd internal standard)	0.424	0.424	0.416	0.416	6	6
			Pentachlorophenol (4th internal standard)	0.147	0.147	0.146	0.146	1	1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.935	0.935	0.919	0.910	6	6
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.632	1.632	1.607	1.607	8	8
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2s

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	FF093I	6/23/11	Phenol (1st internal standard)	2.803	2.801	2.801	0	0
			~~Naphthalene~~ Nitrobenzene (2nd internal standard)	0.518	0.531	0.531	2	2
			~~Fluorene~~ 2-Nitrophenol (3rd internal standard)	0.401	0.422	0.422	5	5
			Pentachlorophenol (4th internal standard)	0.144	0.398	0.398	1	1
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.777	0.846	0.846	9	9
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.572	1.654	1.654	9	9
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G29
SDG #: see Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	84.598	85	85	0
2-Fluorobiphenyl	↓	86.782	87	87	
Terphenyl-d14	↓	81.147	81	81	↓
Phenol-d5	200	153.785	77	77	
2-Fluorophenol	↓	159.443	80	80	
2,4,6-Tribromophenol	↓	162.808	81	81	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26277Q2Q

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1661.13	1661.13	ND	1123.1	1153.15	68	68	70	70	3	3
N-Nitroso-di-n-propylamine				1105.67	1098.6	67	67	67	67	1	1
4-Chloro-3-methylphenol				1202.48	1179.35	72	72	71	71	2	2
Acenaphthene				1285.45	1287.35	77	77	78	78	0	0
Pentachlorophenol				1101.94	1163.69	66	66	71	71	5	5
Pyrene				1306.62	1289.65	79	79	78	78	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277929

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 162 LBLCS

Compound	Spike Added (ug/Kg)		Spike Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol	1433.33	NA	1153.14	NA	80	80				
N-Nitroso-di-n-propylamine	1666.67		1116.71		67	67				
4-Chloro-3-methylphenol	1466.67		1201.12		82	82				
Acenaphthene	↓		1245.03		85	85				
Pentachlorophenol	1366.67		1114.69		82	82				
Pyrene	1566.67	↓	1294.66	↓	83	83	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G29

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1, EEE:

Conc. = $\frac{(6402)(40)(1000)(\quad)(\quad)}{(492163)(0.777)(30)(0.88)(\quad)}$

=

25 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all compounds.

Average relative response factors (RRF) for all compounds were within method and validation criteria.

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for calibration check compounds (CCCs) and 25.0% for all other compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatiles were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKWK160	6/9/11	Bis(2-ethylhexyl)phthalate Di-n-octylphthalate	0.061 ug/L 0.065 ug/L	All water samples in SDG DE176

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
EB16-SA8N-SB-060811	Bis(2-ethylhexyl)phthalate	0.069 ug/L	1.0U ug/L

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No semivolatiles were found with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB16-SA8N-SB-060811	6/8/11	Di-n-butylphthalate Diethylphthalate Naphthalene	0.71 ug/L 0.30 ug/L 0.060 ug/L	All soil samples in SDG DE176
EB16-SA8N-SB-060811	6/8/11	Bis(2-ethylhexyl)phthalate	0.069 ug/L	SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-106-SA8N-SB-2.5-3.5

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated field blanks.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
160WKLCS/D (All water samples in SDG DE176)	1-Methylnaphthalene	134 (71-117)	119 (71-117)	-	J (all detects)	P
	Naphthalene	128 (72-109)	126 (72-109)	-	J (all detects)	
	2-Methylnaphthalene	118 (75-115)	-	-	J (all detects)	
	Acenaphthylene	132 (70-110)	124 (70-110)	-	J (all detects)	
	Acenaphthene	129 (74-109)	132 (74-109)	-	J (all detects)	
	Diethylphthalate	137 (57-134)	-	-	J (all detects)	
	Fluorene	157 (75-114)	128 (75-114)	-	J (all detects)	
	Phenanthrene	130 (76-111)	127 (76-111)	-	J (all detects)	
	Anthracene	140 (66-111)	130 (66-111)	-	J (all detects)	
	Di-n-butylphthalate	133 (74-131)	149 (74-131)	-	J (all detects)	
	Fluoranthene	138 (75-116)	158 (75-116)	-	J (all detects)	
	Pyrene	146 (69-118)	130 (69-118)	-	J (all detects)	
	Benzo(a)anthracene	129 (72-114)	129 (72-114)	-	J (all detects)	
	Chrysene	131 (76-116)	129 (76-116)	-	J (all detects)	
	Benzo(b)fluoranthene	127 (69-123)	125 (69-123)	-	J (all detects)	
	Benzo(k)fluoranthene	135 (59-130)	138 (59-130)	-	J (all detects)	
	Benzo(a)pyrene	130 (60-127)	148 (60-127)	-	J (all detects)	
	Indeno(1,2,3-cd)pyrene	145 (69-124)	162 (69-124)	-	J (all detects)	
	Dibenz(a,h)anthracene	149 (55-134)	172 (55-134)	-	J (all detects)	
	Benzo(g,h,i)perylene	-	136 (57-131)	-	J (all detects)	

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

All tentatively identified compounds were within validation criteria.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Naphthalene	0.94	1.2	24 (≤50)	-	-

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	EB16-SA8N-SB-060811	1-Methylnaphthalene Naphthalene 2-Methylnaphthalene Acenaphthylene Acenaphthene Diethylphthalate Fluorene Phenanthrene Anthracene Di-n-butylphthalate Fluoranthene Pyrene Benzo(a)anthracene Chrysene Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All TCL compounds	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE176	EB16-SA8N-SB-060811	Bis(2-ethylhexyl)phthalate	1.0U ug/L	A	B

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G2b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories SW 01A Reviewer: EB
2nd Reviewer: A

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ (EPA SW 846 Method 8270C-SIM)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS 1
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9, 14
XVII.	Field blanks	SW	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	SBLKLJ167	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	SBLKWK160	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 26277G2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G36

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target compound identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively identified compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System performance				
System performance was found to be acceptable.	✓			
XV. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277G2b

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank analyzed for each matrix?
Y N N/A Was a method blank analyzed for each concentration preparation level?
Y N N/A Was a method blank associated with every sample?
Y N N/A Was the blank contaminated? If yes, please see qualification below.

(B)

Blank extraction date: 6/9/11 **Blank analysis date:** 6/16/11
Conc. units: ug/L Associated Samples: all water

Compound	Blank ID	Sample Identification							
[redacted]	SBLKWK160	15							
EEE	0.061		0.069 / 1.04						
FFF	0.065		-						

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated method blank concentration were qualified as not detected, "U". Other contaminants within five times the method blank concentration were also qualified as not detected, "U".

LDC #: 26277G25

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?

(F)

Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 6/8/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: All SOILS ND + > 5X, 10X

Compound	Blank ID	Sample Identification								
	15	5X/10X								
XX	0.71	7.1								
LL	0.30	3.0								
~~EEE~~	~~0.069~~	~~0.69~~								
S	0.060	0.3								
CRQL										

(F)

Blank units: ug/L **Associated sample units:** ug/kg
Sampling date: 6/8/11
Field blank type: (circle one) Field Blank / Rinsate / Other: EB Associated Samples: 3, 4, 5, 8, 11 (ND + > ~~10X~~)

Compound	Blank ID	Sample Identification								
	15									
EEE	0.069									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 26277G2b

VALIDATION FINDINGS WORKSHEET

Surrogate Recovery

Page: 1 of 1

Reviewer: FT

2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y [✓ N] N/A Were percent recoveries (%R) for surrogates within QC limits?

Y N [✓ N/A] If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?

Y N [✓ N/A] If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		15	NBZ	138 (40-130)	no qual
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
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				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 26277B2b

VALIDATION FINDINGS WORKSHEET

Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Was a LCS required?
Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		160WK LCS/D	see	next (page	( )	( )	All water	all J/Pdet (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

Lancaster Laboratories

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: DE176
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS-SIM

160WK LCS ID
all J/Pdet

LCS: 160WKLCS LCSD: 160WKLCSD Analyte	Batch: 11160WAK026 (Sample number(s): 6310785)							
	Spike Added ug/l	LCS Conc ug/l	LCSD Conc ug/l	LCS %Rec	LCSD %Rec	%Rec Limits	%RPD	%RPD Limits
N-Nitrosodimethylamine	1	.8	.62	80	62	36-89	26	30
1-Methylnaphthalene	1	1.34	1.19	134 *	119 *	71-117	12	30
Naphthalene	1	1.28	1.26	128 *	126 *	72-109	2	30
2-Methylnaphthalene	1	1.18	1	118 *	100	75-115	17	30
Acenaphthylene	1	1.32	1.24	132 *	124 *	70-110	6	30
Dimethylphthalate ✓	1	1.1	1.16	110	116	40-119	5	30
Acenaphthene	1	1.29	1.32	129 *	132 *	74-109	2	30
Diethylphthalate ✓	1	1.37	1.24	137 *	124	57-134	11	30
Fluorene	1	1.57	1.28	157 *	128 *	75-114	21	30
Phenanthrene	1	1.3	1.27	130 *	127 *	76-111	2	30
Anthracene	1	1.4	1.3	140 *	130 *	66-111	7	30
Di-n-butylphthalate ✓	1	1.33	1.49	133 *	149 *	74-131	12	30
Fluoranthene	1	1.38	1.58	138 *	158 *	75-116	14	30
Pyrene	1	1.46	1.3	146 *	130 *	69-118	12	30
Butylbenzylphthalate ✓	1	1.25	1.26	125	126	40-138	1	30
Bis(2-Ethylhexyl)phthalate ✓	1	1.26	1.24	126	124	57-154	2	30
Benzo(a)anthracene	1	1.29	1.29	129 *	129 *	72-114	0	30
Chrysene	1	1.31	1.29	131 *	129 *	76-116	2	30
Di-n-octylphthalate	1	1.36	1.25	136	125	57-145	8	30
Benzo(b)fluoranthene	1	1.27	1.25	127 *	125 *	69-123	2	30
Benzo(k)fluoranthene	1	1.35	1.38	135 *	138 *	59-130	3	30
Benzo(a)pyrene	1	1.3	1.48	130 *	148 *	60-127	12	30
Indeno(1,2,3-cd)pyrene	1	1.45	1.62	145 *	162 *	69-124	11	30
Dibenz(a,h)anthracene	1	1.49	1.72	149 *	172 *	55-134	14	30
Benzo(g,h,i)perylene	1	1.24	1.36	124	136 *	57-131	9	30

DE176 2149

LDC #: 26277G2b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

(FB)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/kg)		± SD RPD
	9	14	
S	0.94	1.2	24

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277026

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (/ std)	Recalculated RRF (/ std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/9/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.101	1.01	1.101	1.101	3	3
			Fluorene (3rd internal standard)	1.573	1.573	1.558	1.558	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.376	1.376	1.342	1.342	7	7
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.554	1.554	1.530	1.530	3	3
			Benzo(a)pyrene (6th internal standard)	1.393	1.393	1.370	1.370	5	5
2	ICAL	6/16/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.067	1.067	1.071	1.071	3	3
			Fluorene (3rd internal standard)	1.304	1.304	1.253	1.253	5	5
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.125	1.125	1.118	1.118	7	7
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.200	1.200	1.206	1.206	3	3
			Benzo(a)pyrene (6th internal standard)	1.083	1.083	1.076	1.076	4	4
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CF0571.d	6/24/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.101	1.060	1.060	4	4
			Fluorene (3rd internal standard)	1.558	1.461	1.461	6	6
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.342	1.328	1.328	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.530	1.499	1.499	2	2
			Benzo(a)pyrene (6th internal standard)	1.370	1.455	1.455	6	6
2	CF0591	6/26/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		1.051	1.051	5	5
			Fluorene (3rd internal standard)		1.453	1.453	7	7
			~~Pentachlorophenol~~ Anthracen (4th internal standard)		1.329	1.329	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)		1.529	1.529	0	0
			Benzo(a)pyrene (6th internal standard)		1.446	1.446	6	6
3	CF0609	6/27/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)		1.075	1.075	2	2
			Fluorene (3rd internal standard)		1.478	1.478	5	5
			~~Pentachlorophenol~~ Anthracen (4th internal standard)		1.333	1.333	1	1
			~~Bis(2-ethylhexyl)phthalate~~ Chrysen (5th internal standard)		1.541	1.541	1	1
			Benzo(a)pyrene (6th internal standard)		1.471	1.471	7	7

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277g2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	1.053	105	105	0
2-Fluorobiphenyl	1.0	0.861	86	86	
Terphenyl-d14	1.0	1.005	100	101	↓
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26271940

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-----	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	33.22	33.22	ND	28.57	28.95	86	86	87	87	1	1
Pentachlorophenol											
Pyrene	↓	↓	ND	28.51	27.74	86	86	83	83	3	3

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2D

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 1671 LCS

Compound	Spike Added (ug/kg)		Spike Concentration (ug/g)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.47	NA	91	91				
Pentachlorophenol										
Pyrene	33.33	↓	31.99	↓	96	96	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277926

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 . Butylbenzylphthalate

Conc. = $\frac{(47538)(1.0)(1000)(\quad)(\quad)}{(229437)(0.760)(30)(0.88)(\quad)}$

=

10.3 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1625C for N-Nitrosodimethylamine.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Compound	Total Days From Sample Collection Until Extraction	Required Holding Time (in Days) From Sample Collection Until Extraction	Flag	A or P
SL-109-SA8N-SB-9.0-10.0	N-Nitrosodimethylamine	21	14	J (all detects) UJ (all non-detects)	A

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance check is not required for by this method.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent differences (%D) of the second source calibration standard were less than or equal to 30.0% .

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-076-SA8N-SB-7.5-8.5	N-Nitrosodimethylamine-d6	151 (50-150)	N-Nitrosodimethylamine	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	N-Nitrosodimethylamine	69 (70-130)	-	-	J (all detects) UJ (all non-detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was within validation criteria.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No N-nitrosodimethylamine was detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
N-Nitrosodimethylamine	37.4U	19.3	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-109-SA8N-SB-9.0-10.0	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Technical holding time (H)
DE176	SL-076-SA8N-SB-7.5-8.5	N-Nitrosodimethylamine	J (all detects)	P	Surrogate spikes (%R) (S)
DE176	SL-076-SA8N-SB-4.0-5.0	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G2c **VALIDATION COMPLETENESS WORKSHEET** Date: 10/10/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: GC/MS N-Nitrosodimethylamine (EPA Method 1625C)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	N	Not Required
III.	Initial calibration	A	%D ≤ 30
IV.	Continuing calibration/ICV	A	ICV ≤ 30 CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 9 & 14
XVII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	SBLKLF161	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	SBLKLC179	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

LDC #: 26277G2C

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.		✓		
Cooler temperature criteria was met.	✓			
II. GC/MS instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?	✓			
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 20 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?		✓		
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?		✓		
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal Standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within ± 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: FT
2nd Reviewer: A

All circled dates have exceeded the technical holding times.
Y N N/A Were all cooler temperatures within validation criteria?

METHOD : GC/MS BNA (EPA SW 846 Method 8270)

Sample ID	Matrix	Preserved	Sampling Date	Extraction date	Analysis date	Total # of Days	Qualifier
13	SOIL	✱	6/8/11	6/29/11	7/2/11	21	J/UJ/R (H)

TECHNICAL HOLDING TIME CRITERIA

Water: Extracted within 7 days, analyzed within 40 days.
Soil: Extracted within 14 days, analyzed within 40 days.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS ~~BNA (EPA SW 846 Method 8270)~~ 1625C

Please see qualification below for all questions answered "N". Not applicable questions are identified as "N/A".

Y (N) N/A Were percent recoveries (%R) for surrogates within QC limits?
Y (N) N/A If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?
Y N (N/A) If any %R was less than 10 percent, was a reanalysis performed to confirm %R?

#	Date	Sample ID	Surrogate	%R (Limits)	Qualifications
		5, 6	surrogate	out side limit ( )	no qual 10X DL
				( )	
				( )	
				( )	
				( )	
				( )	
		10	*	157 (20-150)	J/Pdet (5)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
		* N-Nitrosodimethylamine-d6		( )	

* QC limits are advisory	QC Limits (Soil)	QC Limits (Water)		QC Limits (Soil)	QC Limits (Water)
S1 (NBZ) = Nitrobenzene-d5	23-120	35-114	S5 (2FP)= 2-Fluorophenol	25-121	21-100
S2 (FBP) = 2-Fluorobiphenyl	30-115	43-116	S6 (TBP) = 2,4,6-Tribromophenol	19-122	10-123
S3 (TPH) = Terphenyl-d14	18-137	33-141	S7 (2CP) = 2-Chlorophenol-d4	20-130*	33-110*
S4 (PHL) = Phenol-d5	24-113	10-94	S8 (DCB) = 1,2-Dichlorobenzene-d4	20-130*	16-110*

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC~~/MS BNA (EPA SW 846 Method 8270)~~ 1625C

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

[✓ Y] N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		15 + 16	000	69 (70-130)	( )	( )	9	J/UJ/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 26277Q2C

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

(FD)

Compound	Concentration (ng/kg)		RPD (≤ 50)
	9	14	
000	37.44	19.3	200 J/UJ/A

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (10 std)	Recalculated RRF (10 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/09/11	~~Phenol (1st internal standard)~~ NDMA	1.142	1.142	1.176	1.176	10	10
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			~~Benzo(a)pyrene (6th internal standard)~~						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 14:54	6/29/11	~~Phenol (1st internal standard)~~ NDMA	1.17602	1.09173	1.09173	7.16703	7.167
			Naphthalene (2nd internal standard)					
	CCV 18:17	6/29/11	Fluorene (3rd internal standard) ↓	↓	1.00833	1.00833	14.25861	14.258
			Pentachlorophenol (4th internal standard)					
	CCV 21:38	6/29/11	Bis(2-ethylhexyl)phthalate (5th internal standard) ↓	↓	1.00055	1.00055	14.92058	14.921
			~~Benzo(a)pyrene (6th internal standard)~~					
2	CCV 19:40	7/01/11	~~Phenol (1st internal standard)~~ ↓	↓	1.01203	1.01203	13.94456	13.946
			Naphthalene (2nd internal standard)					
	CCV 23:01	7/01/11	Fluorene (3rd internal standard) ↓	↓	1.09263	1.09263	7.09027	7.09027
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
N-Nitrosodimethylamine-d6 / Nitrobenzene-d5	25	29.437	118	118	0
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 26d1/92c

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/Kg)		Sample Concentration (ug/Kg)	Spiked Sample Concentration (ug/Kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											
NDMA	827.81	827.81	ND	571.98	571.79	69	69	70	70	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 161LFLCS

Compound	Spike Added (ng/Kg)		Spike Concentration (ng/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol NPMA	83333	NA	69111	NA	83	83	NA			
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_t	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #1 , NDMA

Conc. = $\frac{(9044)(25)(1000)(\quad)(\quad)}{(209738)(1.176)(30)(28)(\quad)}$

=

34.7 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

III. Initial Calibration

Initial calibration of multicomponent compounds was performed for the primary (quantitation) column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

Retention time windows were evaluated and considered technically acceptable.

IV. Continuing Calibration

Continuing calibration was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/16/11	3P20164.42R	ZBMultiR1	Aroclor-1016	21.0	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD	Aroclor-1016 Aroclor-1221 Aroclor-1232	J (all detects) UJ (all non-detects)	A
6/16/11	3P20164.43R	ZBMultiR1	Aroclor-5460	24.2	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD	Aroclor-5460	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
6/16/11	3P20164.43R	ZBMultiR2	Aroclor-5460	30.2	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 SL-076-SA8N-SB-4.0-5.0MS SL-076-SA8N-SB-4.0-5.0MSD	Aroclor-5460	J (all detects) UJ (all non-detects)	A
6/16/11	4P20164.08R	ZBMultiR1	Aroclor-5432	24.6	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 PBLK07162	Aroclor-5432	J (all detects) UJ (all non-detects)	A

The percent difference (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated biphenyl contaminants were found in the method blanks.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No polychlorinated biphenyl contaminants were found.

VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
PBLK07162	Not specified	Decachlorobiphenyl	122 (45-120)	All TCL compounds	J (all detects)	P

VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Affected Compound	Flag	A or P
LCS/D07162 (All soil samples in SDG DE176)	Aroclor-5442	144 (36-106)	120 (36-106)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P
LCS/D15165 (All water samples in SDG DE176)	Aroclor-5442	86 (38-84)	88 (38-84)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported RLs

All compound quantitation and RLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
SL-028-SA5DN-SB-11.5-12.5	Aroclor-1248 Aroclor-1254	Sample result exceeded calibration range.	Reported result should be within calibration range.	J (all detects) J (all detects)	P

The sample results for detected compounds from the two columns were within 40% relative percent difference (RPD) with the following exceptions:

Sample	Compound	RPD	Flag	A or P
SL-028-SA5DN-SB-4.0-5.0	Aroclor-1254	149.25	J (all detects)	A
SL-076-SA8N-SB-4.0-5.0	Aroclor-1260	50.52	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIV. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XV. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Aroclor-1260	3.4	2.4	34 (≤50)	-	-

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	Aroclor-1016 Aroclor-1221 Aroclor-1232 Aroclor-5460	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0	Aroclor-5432	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-028-SA5DN-SB-11.5-12.5	Aroclor-1248 Aroclor-1254	J (all detects) J (all detects)	P	Compound quantitation and RLs (exceeded range) (*XIII)
DE176	SL-028-SA5DN-SB-4.0-5.0	Aroclor-1254	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE176	SL-076-SA8N-SB-4.0-5.0	Aroclor-1260	J (all detects)	A	Compound quantitation and RLs (RPD) (*XIII)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G3b **VALIDATION COMPLETENESS WORKSHEET** Date: 10/11/12
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	%RSD ≤20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	LCS/D
IX.	Regional quality assurance and quality control	N	
X.	Florisil cartridge check	N	
XI.	GPC Calibration	N	
XII.	Target compound identification	A	
XIII.	Compound quantitation/RL/LOQ/LODs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	SW	D = 9 + 14
XVI.	Field blanks	ND	EB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL + Water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK071262	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	PBLK15165	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 262 7793b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓	✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?				
IX. Regional Quality Assurance and Quality Control			✓	
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26276936
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: [illegible]

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓	✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: Pesticide/PCBs (EPASW 846 Method 8081/8082)

A. alpha-BHC	I. Dieldrin	Q. Endrin ketone	Y. Aroclor-1242	GG.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 26277G3b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: A

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD

Y N N/A Were continuing calibration standards analyzed at the required frequencies?

Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤20..0%?

Level IV Only

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	6/16/11	3P20164.42R	ZB Multi R1	Y	21.0	( )	9-14, 16, 17	J/UJ/A (C)
						( )		qual V, W, X
						( )		
	6/16/11	3P20164.43R	ZB Multi R1	Aroclor 5460	24.2	( )	↓	J/UJ/A (C)
			↓ R2	↓	30.2	( )		↓
						( )		qual 5460 only
						( )		
						( )		
	6/16/11	4P20164.08R	ZB Multi R1	Aroclor 5432	24.6	( )	1PBLK07162, 1-8	J/UJ/A (C)
						( )		qual 5432 only
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 26277G3h

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ **GC** __ **HPLC**

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y (N) N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	PBLK07162	NS	o	122 (45-120)	J/Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277G3b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: FT

2nd Reviewer: Q

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y (N) N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

(Y) N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D 07162	Aroclor 5442	144 (36-106)	120 (36-106)	( )	All soils	J/PdeT (L)
			( )	( )	( )		qual 5442 [illegible]
			( )	( )	( )		5482 5460
			( )	( )	( )		
	LCS/D 15165	↓	80 (38-84)	88 (38-84)	( )	all water	↓ (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277036
SDG #: pu cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: FT
2nd Reviewer: A

METHOD: ___ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Level IV/D Only
Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?
Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding	Associated Samples	Qualifications
	Z, AA	x'ol cal Range	6	J/Pdet * XIII

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277G3b
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: F7
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 cols Finding ≤ 40	Associated Samples	Qualifications
	AA	149.25	5	J/A det * XIII
	BB	50.52	9	J/A det * XIII

Comments: See sample calculation verification worksheet for recalculations

LDC #: 26277G3h

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: ___ GC __ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤ 52	Qualification Parent only / All Samples
	9	14		
BB	3.4	2.4	34	

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 26277G3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20 std)	Recalculated CF (20 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/13/11	1260 - 1 2Bmulti R1	37	37	37	37	2.9	2.9
			✓ 2Bmulti R2	206	206	204	204	8.5	8.5
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

INICIAL SB

LDC #: 26277G3b
SDG #: fw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	3P20164.42R	6/16/11	Aroclor-1260 ZB5MultiR1	200.00	234.61	234.61	17.3	17.3
			↓ R2	200.00	217.30	217.30	8.7	8.7
2	3P20164.65R	6/16/11	↓	↓	247.11	247.11	23.6	23.6
					208.21	208.21	4.1	4.1
3	3P20164.77R	6/16/11	↓	200	228.49	228.49	14.2	14.2
			↓	↓	215.10	215.10	7.5	7.5
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TCMX	ZB-2	1.036	0.991772	96	96	0
PCB	ZB-1	1.036	~~0.958297~~	97	97	0
			1.010229			

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #:_____ VALIDATION FINDINGS WORKSHEET Page:__of__

SDG #: pw canned

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer:

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration

SA = Spike added

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 16 + 17

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.56	16.56	3.05	20.01	21.85	102	102	113	113	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G3b
SDG #: µg cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: R
2nd Reviewer: C

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS07162

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB 1260	16.67	NA	22.41	NA	134	134	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26776b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. 5 Compound Name Aroclor 1254

Concentration = 0.49223 / 0.855

0.58 ug/kg

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications
	1254-1 = (6289.850586)(3) / (188)(60.4) = 1.10784			1254-1 = 1.10793	
				-2 = 0.15900	
				-3 = 0.21484	
				Av= 0.49223	

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 6, 2011

Matrix: Soil/Water

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD
SL-076-SA8N-SB-4.0-5.0DUP

Introduction

This data review covers 17 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, 7470A, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. ICPMS Tune

The mass calibration was within 0.1 AMU and the percent relative standard deviation (%RSD) was less than or equal to 5% .

III. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No metal contaminants were found in the initial, continuing and preparation blanks with the following exceptions:

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
PB (prep blank)	Magnesium Mercury	19.500 ug/L 0.116 ug/L	All water samples in SDG DE176
ICB/CCB	Magnesium Titanium	41.2 ug/L 0.60 ug/L	All water samples in SDG DE176
PB (prep blank)	Calcium Iron Lead Magnesium Phosphorus Tin	4.395 mg/Kg 4.735 mg/Kg 0.015 mg/Kg 1.035 mg/Kg 1.618 mg/Kg 1.792 mg/Kg	All soil samples in SDG DE176
ICB/CCB	Titanium	0.39 ug/L	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-076-SA8N-SB-4.0-5.0

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Titanium	0.55 ug/L	SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-023-SA5DN-SB-20.0-21.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-025-SA5DN-SB-4.0-5.0	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-025-SA5DN-SB-23.0-24.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-028-SA5DN-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-028-SA5DN-SB-11.5-12.5	Tin	2.4 mg/Kg	2.4U mg/Kg
SL-051-SA5DN-SB-4.0-5.0	Tin	2.7 mg/Kg	2.7U mg/Kg
SL-051-SA5DN-SB-14.0-15.0	Tin	2.5 mg/Kg	2.5U mg/Kg
SL-076-SA8N-SB-4.0-5.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-076-SA8N-SB-7.5-8.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-106-SA8N-SB-2.5-3.5	Tin	3.2 mg/Kg	3.2U mg/Kg
SL-109-SA8N-SB-4.0-5.0	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-109-SA8N-SB-9.0-10.0	Tin	2.8 mg/Kg	2.8U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
DUP10-SA8N-QC-060811	Tin	2.8 mg/Kg	2.8U mg/Kg
EB16-SA8N-SB-060811	Mercury	0.060 ug/L	0.060U ug/L

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No metal contaminants were found with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB16-SA8N-SB-060811	6/8/11	Lead Mercury	0.066 ug/L 0.060 ug/L	SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated field blanks with the following exceptions:

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-076-SA8N-SB-4.0-5.0	Mercury	0.024 mg/Kg	0.024U mg/Kg
DUP10-SA8N-QC-060811	Mercury	0.032 mg/Kg	0.032U mg/Kg

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

VI. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (All soil samples in SDG DE176)	Antimony	64 (75-125)	62 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-076-SA8N-SB-4.0-5.0MS/MSD (All soil samples in SDG DE176)	Beryllium	126 (75-125)	144 (75-125)	-	J (all detects)	A
	Cadmium	151 (75-125)	141 (75-125)	-	J (all detects)	
	Chromium	160 (75-125)	145 (75-125)	-	J (all detects)	
	Cobalt	147 (75-125)	138 (75-125)	-	J (all detects)	
	Copper	160 (75-125)	153 (75-125)	-	J (all detects)	
	Lead	205 (75-125)	179 (75-125)	-	J (all detects)	
	Molybdenum	153 (75-125)	141 (75-125)	-	J (all detects)	
	Nickel	183 (75-125)	173 (75-125)	-	J (all detects)	
	Selenium	136 (75-125)	-	-	J (all detects)	
	Silver	150 (75-125)	137 (75-125)	-	J (all detects)	
	Thallium	162 (75-125)	155 (75-125)	-	J (all detects)	
	Vanadium	204 (75-125)	189 (75-125)	-	J (all detects)	

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0DUP (All soil samples in SDG DE176)	Arsenic	23 (≤20)	-	J (all detects) UJ (all non-detects)	A
	Lead	21 (≤20)	-		
	Manganese	92 (≤20)	-		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-076-SA8N-SB-4.0-5.0	Chromium Copper Vanadium	15 (≤10) 13 (≤10) 15 (≤10)	All soil samples in SDG DE176	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE176	All analytes reported below the RL and above the MDL.	J (all detects)	A

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No metals were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Aluminum	24500	24700	1 (≤50)	-	-
Antimony	0.27	0.20	30 (≤50)	-	-
Arsenic	9.5	11.5	19 (≤50)	-	-
Barium	119	165	32 (≤50)	-	-
Beryllium	0.87	1.1	23 (≤50)	-	-
Boron	4.5	4.5	0 (≤50)	-	-
Cadmium	0.078	0.11	34 (≤50)	-	-
Calcium	2430	2430	0 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Chromium	18.8	22.3	17 (≤50)	-	-
Cobalt	6.6	8.7	27 (≤50)	-	-
Copper	10.2	12.6	21 (≤50)	-	-
Iron	23200	23100	0 (≤50)	-	-
Lead	7.7	9.7	23 (≤50)	-	-
Lithium	31.3	31.4	0 (≤50)	-	-
Magnesium	4360	4370	0 (≤50)	-	-
Manganese	280	230	20 (≤50)	-	-
Mercury	0.024	0.032	29 (≤50)	-	-
Molybdenum	1.2	1.5	22 (≤50)	-	-
Nickel	16.0	20.0	22 (≤50)	-	-
Phosphorus	238	240	1 (≤50)	-	-
Potassium	2160	2150	0 (≤50)	-	-
Selenium	0.13	0.13	0 (≤50)	-	-
Silver	0.070	0.088	23 (≤50)	-	-
Sodium	122	134	9 (≤50)	-	-
Strontium	16.8	16.9	1 (≤50)	-	-
Thallium	0.33	0.41	22 (≤50)	-	-
Tin	2.8	2.8	0 (≤50)	-	-
Titanium	1210	1190	2 (≤50)	-	-
Vanadium	40.1	49.0	20 (≤50)	-	-
Zinc	62.6	85.1	30 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Zirconium	3.5	3.1	12 (≤50)	-	-

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Beryllium Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Selenium Silver Thallium Vanadium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Arsenic Lead Manganese	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	Chromium Copper Vanadium	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE176	SL-152-SA5DN-SS-0.0-0.5 SL-153-SA5DN-SS-0.0-0.5 SL-154-SA5DN-SS-0.0-0.5 SL-155-SA5DN-SS-0.0-0.5 SL-156-SA5DN-SS-0.0-0.5 SL-157-SA5DN-SS-0.0-0.5 SL-158-SA5DN-SS-0.0-0.5 SL-159-SA5DN-SS-0.0-0.5 SL-160-SA5DN-SS-0.0-0.5 SL-162-SA5DN-SS-0.0-0.5 SL-166-SA5DN-SS-0.0-0.5 SL-207-SA5DN-SS-0.0-0.5 DUP-13-SA5DN-QC-060311 EB14-SA5DN-SB-060311 EB13-SA5DN-SS-060311 SL-019-SA5DN-SB-4.0-5.0 SL-019-SA5DN-SB-9.0-10.0 SL-027-SA5DN-SB-4.0-5.0 SL-027-SA5DN-SB-14.0-15.0 SL-052-SA5DN-SB-4.0-5.0 SL-052-SA5DN-SB-9.0-10.0	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Metals - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Tin	2.7U mg/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Tin	2.5U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-4.0-5.0	Tin	2.6U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-23.0-24.0	Tin	2.5U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Tin	2.4U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Tin	2.7U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-14.0-15.0	Tin	2.5U mg/Kg	A	B
DE176	SL-076-SA8N-SB-4.0-5.0	Tin	2.8U mg/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Tin	3.0U mg/Kg	A	B
DE176	SL-106-SA8N-SB-2.5-3.5	Tin	3.2U mg/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Tin	3.0U mg/Kg	A	B
DE176	SL-109-SA8N-SB-9.0-10.0	Tin	2.8U mg/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Tin	2.8U mg/Kg	A	B
DE176	EB16-SA8N-SB-060811	Mercury	0.060U ug/L	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE176	SL-076-SA8N-SB-4.0-5.0	Mercury	0.024U mg/Kg	A	F
DE176	DUP10-SA8N-QC-060811	Mercury	0.032U mg/Kg	A	F

LDC #: 26277G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-4-11

SDG #: DE176 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CC

2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020/~~7000~~ 7420A/7471A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Nonvolitized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(9, 14)
XV	Field Blanks	SW	EB=15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil/water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21		31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	SL-076-SA8N-SB-4.0-5.0DUP	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes: _____

DC #: 262764

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [illegible]

Method: Metals (EPA SW 846 Method 6010B/7000/6020)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. ICP/MS Tune				
Were all isotopes in the tuning solution mass resolution within 0.1 amu?	✓			
Were %RSD of isotopes in the tuning solution ≤5%?	✓			
III. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% (80-120% for mercury) QC limits?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
IV. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
V. ICP Interference Check Sample				
Were ICP interference check samples performed daily?	✓			
Were the AB solution percent recoveries (%R) with the 80-120% QC limits?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of +/- RL(+/-2X RL for soil) was used for samples that were ≤ 5X the RL, including when only one of the duplicate sample values were < 5X the RL.		✓		
VII. Laboratory control samples				
Was an LCS anaylzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% QC limits for water samples and laboratory established QC limits for soils?	✓			

Validation Area	Yes	No	NA	Findings/Comments
VIII. Furnace Atomic Absorption QC				
If MSA was performed, was the correlation coefficients > 0.995?			/	
Do all applicable analysies have duplicate injections? (Level IV only)			/	
For sample concentrations > RL, are applicable duplicate injection RSD values < 20%? (Level IV only)			/	
Were analytical spike recoveries within the 85-115% QC limits?			/	
IX. ICP Serial Dilution				
Was an ICP serial dilution analyzed if analyte concentrations were > 50X the MDL (ICP)/>100X the MDL(ICP/MS)?	/			
Were all percent differences (%Ds) < 10%?		/		
Was there evidence of negative interference? If yes, professional judgement will be used to qualify the data.			/	
X. Internal Standards (EPA SW 846 Method 6020/EPA 200.8)				
Were all the percent recoveries (%R) within the 30-120% (6020)/60-125% (200.8) of the intensity of the internal standard in the associated initial calibration?	/			
If the %Rs were outside the criteria, was a reanalysis performed?	/			
XI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
XII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	/			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	/			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	/			
Target analytes were detected in the field duplicates.	/			
XV. Field blanks				
Field blanks were identified in this SDG.	/			
Target analytes were detected in the field blanks.	/			

LDC #: 26276 4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: [signature]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-15		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
QC: 16-18		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: NA

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water Reason: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	15									
Mg		19.500	41.2	206										
Hg		0.116		0.58	0.060									
Ti			0.60	3										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Ca	4.395			21.98														
Fe	4.735			23.68														
Pb	0.015			0.08														
Mg	1.035			5.175														
P	1.618			8.09														
Sn	1.792			8.96	2.7	2.5	2.6	2.5	2.8	2.4	2.7	2.5	2.8	3.0	3.2	3.0	2.8	2.8

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2, 9

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.39	0.195										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-8, 10-14

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Ti			0.55	0.275										

Samples with analyte concentrations within five times the associated ICB, CCB or PB concentration are listed above with the identifications from the Validation Completeness Worksheet. These sample results were qualified as not detected, "U". Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CA
2nd Reviewer: L

METHOD: Trace Metals (EPA SW846 6010B/7000)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target analytes detected in the field blanks? Reason: F

Blank units: ug/L **Associated sample units:** mg/Kg

Sampling date: 6/8/11 Soil factor applied 100x; Hg=167x

Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: ~~All Soil~~ 9-14

Analyte	Blank ID	Sample Identification											
	15	Action Level	~~1~~	~~5~~	9	14							
Pb	0.066	0.033											
Hg	0.060	0.0501	~~0.019~~	~~0.0085~~	0.024	0.032							
			CA	CA									

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with analyte concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 26776H

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: CR
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Were ICP interference check samples performed as required?
(Y) N N/A Were the AB solution percent recoveries (%R) within the control limits of 80-120% ?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	ICS Identification	Analyte	Concentration (ug/L)	Limit (<MDL)	Associated Samples	Qualifications
	6/10/11	ICSA (12:29/1325	Mn	5	0.84	All Water	No Qual (<90% ICSA)
	6/18/11	ICSA (06:46/09:03)	Mn	4	0.78	All Soil	No Qual (<10x)

Comments:

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

(Y) N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	16|17	S	Sb	64	62		All Soil	J|UJ|A (Q)
			Be	126	144			J det|A
			Cd	151	141			
			Cr	160	145			
			Co	147	138			
			Cu	160	153			
			Pb	205	179			
			Mo	153	141			
			Ni	183	173			
			Se	136				
			Ag	150	137			
			Tl	162	155			
			V	204	189			

Comments: _____

LDC #: 26764

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a duplicate sample analyzed for each matrix in this SDG?

Y N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤ 35% for soil samples? If no, see qualifications below. A control limit of ±R.L. (±2X R.L. for soil) was used for sample values that were <5X the R.L., including the case when only one of the duplicate sample values was <5X R.L.. If field blanks were used for laboratory duplicates, note in the Overall Assessment.

LEVEL IV ONLY:

Y N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Duplicate ID	Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
		18	S	As	23 (≤20)		All Soil	J/UJ/A (E)
				Pb	21		↓	↓
				Mn	92 ↓			

Comments: _____

DUP.4SW

LDC #: 26077G4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A If analyte concentrations were > 50X the MDL (ICP) ,or >100X the MDL (ICP/MS), was a serial dilution analyzed?
Y (N) N/A Were ICP serial dilution percent differences (%D) ≤10%?
Y (N) N/A Is there evidence of negative interference? If yes, professional judgement will be used to qualify the data.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Diluted Sample ID	Matrix	Analyte	%D (Limits)	Associated Samples	Qualifications
		9	S	Cr	15	All Soil	J (UJ/A (A)
				Cu	13	↓	↓
				V	15		

Comments: _____

SDILICPMS.wpd

LDC#: 26277G4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer:
2nd Reviewer:

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	9	14		
Aluminum	24500	24700	1	
Antimony	0.27	0.20	30	
Arsenic	9.5	11.5	19	
Barium	119	165	32	
Beryllium	0.87	1.1	23	
Boron	4.5	4.5	0	
Cadmium	0.078	0.11	34	
Calcium	2430	2430	0	
Chromium	18.8	22.3	17	
Cobalt	6.6	8.7	27	
Copper	10.2	12.6	21	
Iron	23200	23100	0	
Lead	7.7	9.7	23	
Lithium	31.3	31.4	0	
Magnesium	4360	4370	0	
Manganese	280	230	20	
Mercury	0.024	0.032	29	
Molybdenum	1.2	1.5	22	
Nickel	16.0	20.0	22	

LDC#: 26277G4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA Method 6010B/7000)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/Kg)		RPD (≤50)	
	9	14		
Phosphorus	238	240	1	
Potassium	2160	2150	0	
Selenium	0.13	0.13	0	
Silver	0.070	0.088	23	
Sodium	122	134	9	
Strontium	16.8	16.9	1	
Thallium	0.33	0.41	22	
Tin	2.8	2.8	0	
Titanium	1210	1190	2	
Vanadium	40.1	49.0	20	
Zinc	62.6	85.1	30	
Zirconium	3.5	3.1	12	

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: CS
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

An initial and continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found / True x 100 Where, Found = concentration (in ug/L) of each analyte measured in the analysis of the ICV or CCV solution
True = concentration (in ug/L) of each analyte in the ICV or CCV source

Standard ID	Type of Analysis	Element	Found (ug/L)	True (ug/L)	Recalculated %R	Reported %R	Acceptable (Y/N)
ICV	ICP (Initial calibration)	Sn	581.72	600	97.0	97.0	Y
ICV	ICP/MS (Initial calibration)	Pb	50.31	50	100.6	100.6	
ICV	CVAA (Initial calibration)	Hg	2.41	2.5	96.4	96.4	
CCV	ICP (Continuing calibration)	Sr	505.05	500	101.0	101.0	
CCV	ICP/MS (Continuing calibration)	Tl	25.06	25	100.2	100.2	
CCV	CVAA (Continuing calibration)	Hg	0.93	1.0	93.0	93.0	
	GFAA (Initial calibration)						
	GFAA (Continuing calibation)						

Comments: Refer to Calibration Verification findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units)	True / D / SDR (units)	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	As	20.0	20.0	100.0	100.0	Y
LCS	Laboratory control sample	P	1065.3	1000	107	107	
16	Matrix spike	Cd	(SSR-SR) 1.6731	1.665	151	151	
18	Duplicate	K	257.502	251.3924	15	15	
9	ICP serial dilution	Mn	2532.27	2658.55	5	5	

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 7627764

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 3
Reviewer: GR
2nd reviewer: _____

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Al were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

$$\frac{(100mL)(260.8487\ mg/L)}{0.882(1.0g)} = 29574.7\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	29600	29600	Y
		Sb	0.36	0.36	
		As	9.0	9.0	
		Ba	168	168	
		Be	1.1	1.1	
		B	8.9	8.9	
		Cd	0.32	0.32	
		Ca	13900	13900	
		Cr	35.4	35.4	
		Co	12.6	12.6	
		Cu	20.5	20.5	
		Fe	33400	33400	
		Pb	12.6	12.6	
		Li	26.5	26.5	
		Mg	6920	6920	
		Mn	362	362	
		Hg	0.019	0.019	
		Mo	0.59	0.59	
		Ni	26.7	26.7	
		P	308	308	

Note: _____

LDC #: 26277C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for [illegible] were recalculated and verified using the following equation:

Concentration = (RD)(FV)(Dil) / (In. Vol.)

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation:

9: $\frac{100mL\ (21.92253\ mg/L)}{0.886\ (1.025)} = 2425.81\ mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	K	3550	3550	Y
		Se	0.12	0.12	
		Ag	0.055	0.055	
		Na	463	463	
		Sr	43.4	43.4	
		Tl	0.40	0.40	
		Sn	2.7	2.7	
		Ti	1050	1050	
		V	64.2	64.2	
		Zn	94.6	44.6	
		Zr	4.3	4.3	
	9	Al	24500	24500	
		Sb	0.27	0.27	
		As	9.5	9.5	
		Ba	119	119	
		Be	0.87	0.87	
		B	4.5	4.5	
		Cd	0.078	0.078	
		Ca	2430	2430	

Note: [illegible]

LDC #: 7627764

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: AR
2nd reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: see Previous Page

#	Sample ID	Analyte	Reported Concentration (ug/L)	Calculated Concentration (ug/L)	Acceptable (Y/N)
	9	Cr	18.8	18.8	Y
		Co	6.6	6.6	
		Cu	10.2	10.2	
		Fe	23200	23200	
		Pb	7.7	7.7	
		Li	31.3	31.3	
		Mg	4360	4360	
		Mn	280	280	
		Hg	0.024	0.024	
		Mo	1.2	1.2	
		Ni	16.0	16.0	
		P	238	238	
		K	2160	2160	
		Se	0.13	0.13	
		Ag	0.070	0.070	
		Na	122	122	
		Sr	16.8	16.8	
		Tl	0.33	0.33	
		Sn	2.8	2.8	
		Ti	1210	1210	
		V	40.1	40.1	
		Zn	62.6	62.6	
		Zr	3.5	3.5	

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 20, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
EB16-SA8N-SB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0DUP
SL-106-SA8N-SB-2.5-3.5MS
SL-106-SA8N-SB-2.5-3.5DUP

Introduction

This data review covers 18 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, and EPA Method 314.0 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met with the following exceptions:

Sample	Analyte	Total Time From Sample Collection Until Analysis	Required Holding Time From Sample Collection Until Analysis	Flag	A or P
EB16-SA8N-SB-060811	Hexavalent chromium	24.5 hours	24 hours	J (all detects) UJ (all non-detects)	P

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

All criteria for the initial calibration of each method were met.

III. Calibration Verification

Calibration verification frequency and analysis criteria were met for each method when applicable.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No contaminant concentrations were found in the initial, continuing and preparation blanks.

Sample EB16-SA8N-SB-060811 was identified as an equipment blank. No contaminant concentrations were found.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS (SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5)	Fluoride	29 (80-120)	J (all detects) R (all non-detects)	A

Spike ID (Associated Samples)	Analyte	%R (Limits)	Flag	A or P
SL-106-SA8N-SB-2.5-3.5MS (SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811)	Fluoride Nitrate as N	47 (80-120) 74 (80-120)	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

VI. Duplicates

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Sample Result Verification

All sample result verifications were acceptable

All analytes reported below the RL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE176	All analytes reported below the RL and above the MDL.	J (all detects)	A

IX. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

X. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Fluoride	2.5	2.6	4 (≤50)	-	-
Nitrate	1.5	2.0	29 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Hexavalent chromium	0.51	0.48	6 (≤50)	-	-

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE176

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE176	EB16-SA8N-SB-060811	Hexavalent chromium	J (all detects) UJ (all non-detects)	P	Technical holding times (H)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5	Fluoride	J (all detects) R (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE176	SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	Fluoride Nitrate as N	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 EB16-SA8N-SB-060811	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)

Santa Susana Field Laboratory
Wet Chemistry – Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G6 **VALIDATION COMPLETENESS WORKSHEET** Date: 10-4-11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: AC
2nd Reviewer: MC

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	SW	Sampling dates: 6/8/11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS
V	Duplicates	A	Dup
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(9, 14)
X	Field blanks	ND	EB=15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil/water

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21		31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	EB16-SA8N-SB-060811 W	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17	SL-076-SA8N-SB-4.0-5.0DUP	27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18	#11 MS	28		38	
9	SL-076-SA8N-SB-4.0-5.0	19	#11 Dup	29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 627766

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: ✓

Method: Inorganics (EPA Method See cover)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.		✓		
Cooler temperature criteria was met.	✓			
II. Calibration				
Were all instruments calibrated daily, each set-up time?	✓			
Were the proper number of standards used?	✓			
Were all initial calibration correlation coefficients > 0.995?	✓			
Were all initial and continuing calibration verification %Rs within the 90-110% QC limits?	✓			
Were titrant checks performed as required? (Level IV only)			✓	
Were balance checks performed as required? (Level IV only)			✓	
III. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
IV. Matrix spike/Matrix spike duplicates and Duplicates				
Were a matrix spike (MS) and duplicate (DUP) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD or MS/DUP. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the 75-125 QC limits? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.		✓		
Were the MS/MSD or duplicate relative percent differences (RPD) ≤ 20% for waters and ≤ 35% for soil samples? A control limit of ≤ CRDL(≤ 2X CRDL for soil) was used for samples that were ≤ 5X the CRDL, including when only one of the duplicate sample values were < 5X the CRDL.	✓			
V. Laboratory control samples				
Was an LCS anayized for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the 80-120% (85-115% for Method 300.0) QC limits?	✓			
VI. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26776

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: [signature]

Validation Area	Yes	No	NA	Findings/Comments
VII. Sample Result Verification				
Were RLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
Were detection limits < RL?	✓			
VIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
IX. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target analytes were detected in the field duplicates.	✓			
X. Field blanks				
Field blanks were identified in this SDG.	✓			
Target analytes were detected in the field blanks.		✓		

DC #: 26277G6

Page: 1 of 1
Reviewer: CR
2nd reviewer:

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

ll circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-14		pH TDS Cl [✓ F] [✓ NO_3] NO_2 SO_4 PO_4 ALK [✓ CN^-] NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4] ____ ____
15		pH TDS Cl [✓ F] NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4] ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
QC: 16,17		pH TDS Cl [✓ F] [✓ NO_3] NO_2 SO_4 PO_4 ALK [✓ CN^-] NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4] ____ ____
18,19		pH TDS Cl [✓ F] [✓ NO_3] NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4 ____ ____
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4

omments:

LDC #: 26766

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Reviewer: SR
2nd reviewer: W

All circled dates have exceeded the technical holding time.
(Y) N N/A Were all samples preserved as applicable to each method ?
(Y) N N/A Were all cooler temperatures within validation criteria?

Method:	7199					
Parameters:	Cr+6					
Technical holding time:	24hrs					

Sample ID	Sampling date	Analysis date	Analysis date	Analysis date	Analysis date	Analysis date	Qualifier
15	6/8/11 13:45	6/9/11 14:21	(24.5hrs)				J/UJ/R(H)

LDC #: 26776

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: CR
2nd Reviewer:

METHOD: Inorganics, Method SeCaHg

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of ~~75-125~~ (80-120) (85-115% for Method 300.0)? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	Date	Matrix Spike ID	Matrix	Analyte	%R	Associated Samples	Qualifications
		16	G	F	29	~~All Soil~~ 1-10	J/R/A (Q)
		18	S	F	47	11-14	J/UJ/A (Q)
				NO_3	74	~~All Soil~~	

Comments:

LDC# 26277G6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: ___ of ___
Reviewer: ___
2nd Reviewer: ___

Inorganics, Method See Cover

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (mg/L)		RPD (≤50)	
	9	14		
Fluoride	2.5	2.6	4	
Nitrate	1.5	2.0	29	
Hexavalent Chromium	0.51	0.48	6	

V:\FIELD DUPLICATES\FD_inorganic\26277G6.wpd

LDC #: 02145

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units)	True / D (units)	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	F	1.6	1.5	107	-	Y
16	Matrix spike sample	CN	(SSR-SR) 4.6	4.78	96	97	/
17	Duplicate sample	NO_3	1.4	1.4	0	0	/

Comments: Refer to appropriate worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26276G6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer:

METHOD: Inorganics, Method See cover

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments?
Y N N/A Are all detection limits below the CRQL?

Compound (analyte) results for GGT / F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

GGT = Area(85.39) + 0.4357

Recalculation: GGT = (0.1183(85.39) + 0.4357)(25.3) / 0.882 = 0.47 mg/L

F: y = 0.2018x - 0.0044

9: F = ((0.039 + 0.0044 / 0.2018) × 50mL) / 4.91g(0.886) = 2.5 mg/kg

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
0.882	1	F	7.1	7.1	Y
		NO3	1.6	1.6	
		GGT	0.48	0.47	
0.886	9	F	2.5	2.5	
		NO3	1.5	1.5	
		GGT	0.51	0.50	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
TB-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

Sample TB-060811 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No total petroleum hydrocarbons as gasoline were detected in any of the samples.

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811 TB-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G7 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/10/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: F
2nd Reviewer: A

METHOD: GC TPH as Gasoline (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	% RSD ≤30
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9 + 14
XIII.	Field blanks	ND	TB = 15

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: soil + water

1 1	SL-023-SA5DN-SB-4.0-5.0	11 1	SL-106-SA8N-SB-2.5-3.5	21 1	BLKH9	31	
2 1	SL-023-SA5DN-SB-20.0-21.0	12 1	SL-109-SA8N-SB-4.0-5.0	22 2	BLKHK	32	
3 1	SL-025-SA5DN-SB-4.0-5.0	13 2	SL-109-SA8N-SB-9.0-10.0	23 3	BLK13	33	
4 1	SL-025-SA5DN-SB-23.0-24.0	14 2	DUP10-SA8N-QC-060811	24		34	
5 1	SL-028-SA5DN-SB-4.0-5.0	15 3	TB-060811 W	25		35	
6 1	SL-028-SA5DN-SB-11.5-12.5	16 1	SL-076-SA8N-SB-4.0-5.0MS	26		36	
7 1	SL-051-SA5DN-SB-4.0-5.0	17 1	SL-076-SA8N-SB-4.0-5.0MSD	27		37	
8 1	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9 1	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10 1	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 2027697
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 2027197
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 26277G7
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FP
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (223 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	LUFT 34333 ICAL	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
				(552)	(552)				
2	LUFT 2016	6/15/11	↓	7581	7581	7279	7279	5.8	5.8
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277G7
SDG #: pw comm

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: F
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV	6/13/11	GRO	220.00	213.20	213.20	3.1	3.1
	11:00							
2	CCV	6/13/11	GRO	220.00	201.76	201.76	8.3	8.3
	20:39							
3	CCV	6/14/11	GRO	22000	194.07	194.07	11.8	11.8
	10:40							
4	CCV	6/16/11	GRO	550.00	568.92	568.92	3.4	3.4
	6:10							

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: /

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Trifluorotoluene	NS	636.3	509.1017	80	80	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Page: [illegible]
Reviewer: EZ
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 16 + 17

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	9.26	9.26	ND	4.99	5.29	54	54	58	58	6	6
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26217G1
SDG #: All covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: F
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 111 64A34-A

Compound	Spike Added (mg/Kg)		Spiked Sample Concentration (mg/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	NA	8.37	NA	76	76				
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G7
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Quallfications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 8, 2011
LDC Report Date:	October 7, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
PBLK11167	6/16/11	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	All samples in SDG DE176

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-023-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.3 mg/Kg	1.4U mg/Kg
SL-023-SA5DN-SB-20.0-21.0	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.3U mg/Kg
SL-025-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-025-SA5DN-SB-23.0-24.0	Extractable fuel hydrocarbons (C8-C11)	1.4 mg/Kg	1.4U mg/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-028-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	0.99 mg/Kg	1.4U mg/Kg
SL-028-SA5DN-SB-11.5-12.5	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.3U mg/Kg
SL-051-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-051-SA5DN-SB-14.0-15.0	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-076-SA8N-SB-7.5-8.5	Extractable fuel hydrocarbons (C8-C11)	1.1 mg/Kg	1.4U mg/Kg
SL-106-SA8N-SB-2.5-3.5	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.2 mg/Kg	1.4U mg/Kg
SL-109-SA8N-SB-9.0-10.0	Extractable fuel hydrocarbons (C8-C11)	0.95 mg/Kg	1.4U mg/Kg
DUP10-SA8N-QC-060811	Extractable fuel hydrocarbons (C8-C11)	0.99 mg/Kg	1.4U mg/Kg

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	Extractable fuel hydrocarbons (C15-C20)	125 (49-123)	150 (49-123)	-	J (all detects)	A
	Extractable fuel hydrocarbons (C21-C30)	-	158 (49-123)	-	J (all detects)	
	Extractable fuel hydrocarbons (C30-C40)	-	240 (49-123)	51 (≤20)	J (all detects)	

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No total petroleum hydrocarbons as extractables were detected in any of the samples with the following exceptions:

Compound	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-076-SA8N-SB-4.0-5.0	DUP10-SA8N-QC-060811			
Extractable fuel hydrocarbons (C21-C30)	2.1	2.5	17 (≤50)	-	-
Extractable fuel hydrocarbons (C30-C40)	4.8	5.4	12 (≤50)	-	-
Extractable fuel hydrocarbons (C8-C11)	1.2	0.99	19 (≤50)	-	-
Extractable fuel hydrocarbons (C15-C20)	1.4U	0.54	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C15-C20) Extractable fuel hydrocarbons (C21-C30)	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C30-C40)	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)
DE176	SL-076-SA8N-SB-4.0-5.0 DUP10-SA8N-QC-060811	Extractable fuel hydrocarbons (C15-C20)	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE176	SL-023-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-023-SA5DN-SB-20.0-21.0	Extractable fuel hydrocarbons (C8-C11)	1.3U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-025-SA5DN-SB-23.0-24.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-028-SA5DN-SB-11.5-12.5	Extractable fuel hydrocarbons (C8-C11)	1.3U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-051-SA5DN-SB-14.0-15.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE176	SL-076-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-076-SA8N-SB-7.5-8.5	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-106-SA8N-SB-2.5-3.5	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-109-SA8N-SB-4.0-5.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	SL-109-SA8N-SB-9.0-10.0	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B
DE176	DUP10-SA8N-QC-060811	Extractable fuel hydrocarbons (C8-C11)	1.4U mg/Kg	A	B

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G8 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/7/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer: [signature]

METHOD: GC TPH as Extractables (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%D/RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	SW	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK11167	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes: _____

DC #: 462764
DG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277G8
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?		✓		
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G8

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: / GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a given method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction procedure was performed?
Y N N/A Was a method blank performed with each extraction batch?
Y N N/A Were any contaminants found in the method blanks? If yes, please see findings below.

Level IV/D Only

Y N N/A (Gasoline and aromatics only)Was a method blank analyzed with each 24 hour batch?
Y N N/A Was a method blank analyzed for each analytical / extraction batch of ≤20 samples?

(B)

Blank extraction date: ~~6/8/11~~ 6/16/11 **Blank analysis date:** 6/18/11 **Associated samples:** All

Conc. units: mg/kg

Compound	Blank ID	5X	Sample Identification					
	PBLK11167		1	2	3	4	5	6
EFH (C8-C11)	1.1	5.5	1.3/1.4U	1.2/1.3U	1.1/1.4U	1.4/U	0.99/1.4U	1.1/1.3U

Blank extraction date: 6/16/11 **Blank analysis date:** 6/18/11 **Associated samples:** All

Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
	PBLK11167	7	8	9	10	11	12	13
EFH (C8-C11)	1.1	1.1/1.4U	1.1/1.4U	1.2/1.4U	~~1.8/U~~ 1.1/1.4U	1.2/1.4U	1.2/1.4U	0.95/1.4U
↓	↓	14						
↓		0.99/1.4U						

ALL CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC #: 26277G8

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

[✓ Y] N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15 + 16	EFH (C15-C20)	125 (49-123)	150 (49-123)	( )	9	J/Adet (Q)
		EFH (C21-C30)	( )	158 (49-123)	( )	↓	↓ ↓
		EFH (C30-C40)	( )	240 (49-123)	51 (20)	↓	↓ ↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC#: 26277G8

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: F
2nd Reviewer: A

METHOD: TPH Extractables (EPA Method 8015B)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

(FD)

Compound	Concentration (mg/Kg)		≤ 50 RPD	
	9	14		
EFH (C21-C30)	2.1	2.5	17	
EFH (C30-C40)	4.8	5.4	12	
EFH (C8-C11)	1.2	0.99	19	
EFH (C15-C20)	1.4U	0.54	200	J/UJ/A

V:\FIELD DUPLICATES\templates\26277G8.wpd

LDC #: 26277G8
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: F
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (288 std)	Recalculated CF (288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL 28-5	5/22/11	C8-C40	20047.44	20047.44	2067.85	2067.85	5.1	5.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G8
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J168.37R	6/18/11	C8-C40	287.98	304.00	304.00	5.6	5.6
2								
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NS	1.0	0.635061	64	64	0
orthoterphenyl	↓	1.0	0.807792	81	81	↓

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #:_____ VALIDATION FINDINGS WORKSHEET Page:___of___

SDG #: pw covers

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
EFH (08-011)	0.84	0.84	1.04	1.58	1.73	64	64	83	83	9	9

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26271O8
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS11167

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	0-84	NA	0-69	NA	82	82	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277A8
SDG #: all cases

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ~~GC~~ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name C30 - C40

Concentration = $\frac{171242 \; (1000)}{20671.85 \; (60) \; (0.882) \; (1000)}$

$= 1.6 \text{ mg/kg}$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 11, 2011

Matrix: Soil

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8330A for Explosives.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed for the primary (quantitation) column and confirmation column as required by the method.

The percent relative standard deviations (%RSD) were less than or equal to 20.0% for all compounds.

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at the required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No explosive contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	1,3,5-Trinitrobenzene	-	76 (82-126)	-	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS08164	PETN	123 (80-120)	All samples in SDG DE176	J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No explosives were detected in any of the samples.

Santa Susana Field Laboratory
Explosives - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	1,3,5-Trinitrobenzene	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	PETN	J (all detects)	P	Laboratory control samples (%R) (L)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G40 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/10/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
2nd Reviewer:

METHOD: HPLC Explosives (EPA SW 846 Method 8330A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%RSD ≤20, r²≥
III.	Calibration verification/ICV	A	%R ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK 08/16	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 1027764D
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: NA GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277G4U
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: ____GC ____HPLC

8310	8330	8151	8141	8141(Con't)	8021B
A. Acenaphthene	A. HMX	A. 2,4-D	A. Dichlorvos	V. Fensulfothion	V. Benzene
B. Acenaphthylene	B. RDX	B. 2,4-DB	B. Mevinphos	W. Bolstar	CC. Toluene
C. Anthracene	C. 1,3,5-Trinitrobenzene	C. 2,4,5-T	C. Demeton-O	X. EPN	EE. Ethyl Benzene
D. Benzo(a)anthracene	D. 1,3-Dinitrobenzene	D. 2,4,5-TP	D. Demeton-S	Y. Azinphos-methyl	SSS. O-Xylene
E. Benzo(a)pyrene	E. Tetryl	E. Dinoseb	E. Ethoprop	Z. Coumaphos	RRR. MP-Xylene
F. Benzo(b)fluoranthene	F. Nitrobenzene	F. Dichlorprop	F. Naled	AA. Parathion	GG. Total Xylene
G. Benzo(g,h,i)perylene	G. 2.4.6-Trinitrotoluene	G. Dicamba	G. Sulfotep	BB. Trichloronate	
H. Benzo(k)fluoranthene	H. 4-Amino-2,6-dinitrotoluene	H. Dalapon	H. Phorate	CC. Trichlorinate	
I. Chrysene	I. 2-Amino-4,6-dinitrotoluene	I. MCPP	I. Dimethoate	DD. Trifluralin	
J. Dibenz(a,h)anthracene	J. 2,4-Dinitrotolune	J. MCPA	J. Diazinon	EE. Def	
K. Fluoranthene	K. 2,6-Dinitrotoluene	K. Pentachlorophenol	K. Disulfoton	FF. Prowl	
L. Fluorene	L. 2-Nitrotoluene	L. 2,4,5-TP (silvex)	L. Parathion-methyl	GG. Ethion	
M. Indeno(1,2,3-cd)pyrene	M. 3-Nitrotoluene	M. Silvex	M. Ronnel	HH. Tetrachlorvinphos	
N. Naphthalene	N. 4-Nitrotoluene		N. Malathion	II. Sulprofos	
O. Phenanthrene	O.		O. Chlorpyrifos		
P. Pyrene	P.		P. Fenthion		
Q.	Q		Q. Parathion-ethyl		
R.			R. Trichloronate		
S.			S. Merphos		
			T. Stirofos		
			U. Tokuthion		

Notes:_____

LDC #: 26277G40

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: HAA __ GC ✓ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

[✓ Y] N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15+16	C	( )	76 (82-126)	( )	9	J/UJ/A (6)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277G40

VALIDATION FINDINGS WORKSHEET

Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC ✓ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

[✓ Y] N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS08164	PETN	123 (80-120)	( )	( )	All	J/Pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277G4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC [illegible] HPLC [illegible]

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
				501.0/499.5					
1	chromp-ck ICAL	5/31/11	1,3,5 - TNB	1.97×10^2	1.97×10^2	2.00×10^2	2.0×10^2	0.8	0.8
			Nitrobenzene	1.98×10^2	1.98×10^2	2.00×10^2	2.0×10^2	1.8	1.8
2	CAPCELL	5/31/11	↓	3.31×10^2	3.31×10^2	3.32×10^2	3.32×10^2	7.0	7.0
				1.81×10^2	1.81×10^2	1.83×10^2	1.83×10^2	5.8	5.8
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 46277940
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC X HPLC /

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 19:07	6/16/11	1,3,5 - TNB chrompack	500.50	503.48	503.48	0.6	0.6
			Nitrobenzene	499.50	508.04	508.04	1.7	1.7
	CCV 3:36	6/17/11	↓	1001.00	1013.72	1013.72	1.3	1.3
2			↓	999.00	1053.88	1053.88	5.5	5.5
3	CCV 19:07	6/16/11	↓ capcell	500.50	469.11	469.11	6.3	6.3
			↓	499.50	491.92	491.92	1.5	1.5
	CCV 3:36	6/17/11	↓	1001.00	990.10	990.10	1.1	1.1
4			↓	999.00	987.69	987.69	1.1	1.1

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 20211470

SDG #: see cover

METHOD: __ GC ✓ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2. Nitro. m-xylene	CAPCELL	1922.68	2293.756	119	119	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 22474C0

SDG #: per cover

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer: [signature]

METHOD: __ GC ~~/~~ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SA = Spike added SC = Sample concentration

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/Kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)	1851.85	1851.85	ND	1535.48	1505.63	83	83	81	81	2	2
2,4,6-Trinitrotoluene (8330)	↓	↓	↓	1783.86	1788.3	96	96	97	97	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26271G4U
SDG #: mu cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: ___ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: lcs 08164

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2000	NA	2056.69	NA	103	103				
2,4,6-Trinitrotoluene (8330)	1999.2	↓	2108.01	↓	120	120	NR			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26776H0
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Terphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No terphenyl contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-028-SA5DN-SB-4.0-5.0	n-Triacontane-d62	151 (50-150)	All TCL compounds	J (all detects)	P

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	m-Terphenyl	74 (75-125)	-	-	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Terphenyls - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-028-SA5DN-SB-4.0-5.0	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE176	SL-076-SA8N-SB-4.0-5.0	m-Terphenyl	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G41 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/9/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Terphenyls (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	% RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9 & 14
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
soil

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK05166	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 427464
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 26277G4 1
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G4/

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	5	NS	Z	151 (50-150)	J/Pdet (S)
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene	Z	n-Triacontane-d62
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 26277G4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: [✓ GC] HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
[✓ Y] N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15 + 16	m-Terphenyl	74 (75-125)	( )	( )	9	J/UJ/A (Q
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277G4/
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported 15-5W CF (std)	Recalculated 15-5W CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/24/11	m-terphenyl	2.51 X10^4	2.51 X10^4	2.48 X10^4	2.48 X10^4	1.8	1.8
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 76277G4/
SDG #: pw Conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	R167.01R	6/16/11	m-Terphenyl	31.04	30.85	30.85	0.6	0.6
2	R167.12R	6/16/11	↓	↓	31.30	31.30	0.8	0.8
	R167.23R	6/17/11	↓	↓	31.17	31.17	0.4	0.4
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n-Triacontane-d62	SPB-5	0.33330	0.278307	83	83	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ

2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (mg/Kg)		Sample Conc. (mg/Kg)	Spike Sample Concentration (mg/Kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
m-Terphenyl	1.65	1.65	NO	1.22	1.35	74	74	82	82	10	10

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277C4/
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EO
2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS05166

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.65	1.6 NA	1.4	NA	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G4/
SDG #: pu seven

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: A

METHOD: / GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Quallfications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Alcohols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No alcohol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No alcohols were detected in any of the samples.

Santa Susana Field Laboratory
Alcohols - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G43 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer: AL

METHOD: GC Alcohols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation(RL)/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK24160	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22	PBLK18161	32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 26277643
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples	✓			
Was an LCS analyzed for this SDG?				
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

.DC #: 26277G43
SDG #: all cond

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G43
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: F7
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported CF (5000_{std})	Recalculated CF (5000_{std})	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/19/11	Methanol	2.82×10^{0}	2.82×10^{0}	2.95×10^{0}	2.95×10^{0}	12.3	10.3
2	ICAL	5/26/11	↓	9.04×10^{0}	9.04×10^{0}	8.95×10^{0}	8.95×10^{0}	2.0	2.0
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277943
SDG #: fw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: C

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(Ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 19:53	6/9/11	methanol	10000	8870.95	8870.95	11.3	11.3
	CCV 23:06	6/9/11	methanol	↓	9242.42	9242.42	7.6	7.6
2								
	CCV 19:14	6/10/11	methanol	↓	9409.92	9409.92	5.9	5.9
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 22764C7

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1

Reviewer: FT

2nd reviewer: C

METHOD: GC HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Acetone	NS	2500	1882.7632	75	75	0

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

LDC #: 21747 (1)
SDG #: see cover

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: EZ
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	---	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Methane	2500	2500	NO	1821.59	1851.85	73	73	74	74	2	2

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G43
SDG #: all cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS-24160

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methanol	2500	NA	2187.09	NA	87	87	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Quallfications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015B for Glycols.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0%.

Retention time windows were evaluated and considered technically acceptable.

III. Calibration Verification

Calibration verification was performed at required frequencies.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 20.0% QC limits.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-076-SA8N-SB-4.0-5.0MS/MSD (SL-076-SA8N-SB-4.0-5.0)	Ethylene glycol Propylene glycol Diethylene glycol	- - 54 (59-109)	56 (63-107) 59 (63-107) 44 (59-109)	22 (≤20) 23 (≤20) -	J (all detects) UJ (all non-detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No glycols were detected in any of the samples.

Santa Susana Field Laboratory
Glycols - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-076-SA8N-SB-4.0-5.0	Ethylene glycol Propylene glycol	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE176	SL-076-SA8N-SB-4.0-5.0	Diethylene glycol	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G45 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11

SDG #: DE176 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	D = 9, 14
XIII.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK25160	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes: _____

DC #: 26277G45
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: C

Method: / GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	/			
Cooler temperature criteria was met.	/			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	/			
Were all percent relative standard deviations (%RSD) < 20%?	/			
Was a curve fit used for evaluation?		/		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			/	
Were the RT windows properly established?	/			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	/			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	/			
Were all the retention times within the acceptance windows?	/			
V. Blanks				
Was a method blank associated with every sample in this SDG?	/			
Was a method blank analyzed for each matrix and concentration?	/			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		/		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	/			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			/	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	/			
Was a MS/MSD analyzed every 20 samples of each matrix?	/			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		/		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	/			
Was an LCS analyzed per extraction batch?	/			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	/			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			/	
Were the performance evaluation (PE) samples within the acceptance limits?			/	

LDC #: 26277G45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification.				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs.				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XII. System performance.				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data.				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates.				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks.				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277945

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

[✓ Y] N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	15+16	Ethylene glycol	( )	56 (63-107)	22 (20)	9	J/UJ/A (Q)
		Propylene glycol	( )	59 (63-107)	23 (20)	↓	↓
		Diethylene glycol	54 (59-109)	44 (59-109)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26277945
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

4

#	Standard ID	Calibration Date	Compound	Reported CF (207.1872)	Recalculated CF (207.1872std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/11/11	ethylene glycol	3.44×10^2	3.44×10^2	3.30×10^2	3.30×10^2	10.6	10.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G45
SDG #: pw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 12:11	6/11/11	ethylene glycol	103.59	107.55	107.55	3.8	3.8
	CCV 15:23	6/11/11	↓	↓	109.00	109.00	5.2	5.2
2								
	CCV 18:23	6/11/11	↓	↓	106.67	106.67	3.0	3.0
3								
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: _____

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: ✓

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	NS	193	172.039948	89	89	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: 26171A3

SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ

2nd Reviewer: [illegible]

METHOD: ✓ GC ___HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Ethylene Glycol	225.43	225.43	ND	157.11	175.99	70	70	56	56	22	22

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G45
SDG #: all covers

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: EO
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 25160

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
ethylene glycol	225.43	NA	240.49	NA	107	107	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

KD

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications

Comments: _____

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Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: June 8, 2011

LDC Report Date: October 7, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE176

Sample Identification

SL-023-SA5DN-SB-4.0-5.0
SL-023-SA5DN-SB-20.0-21.0
SL-025-SA5DN-SB-4.0-5.0
SL-025-SA5DN-SB-23.0-24.0
SL-028-SA5DN-SB-4.0-5.0
SL-028-SA5DN-SB-11.5-12.5
SL-051-SA5DN-SB-4.0-5.0
SL-051-SA5DN-SB-14.0-15.0
SL-076-SA8N-SB-4.0-5.0
SL-076-SA8N-SB-7.5-8.5
SL-106-SA8N-SB-2.5-3.5
SL-109-SA8N-SB-4.0-5.0
SL-109-SA8N-SB-9.0-10.0
DUP10-SA8N-QC-060811
SL-076-SA8N-SB-4.0-5.0MS
SL-076-SA8N-SB-4.0-5.0MSD

Introduction

This data review covers 16 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8315A for Formaldehyde.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

III. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 20.0% QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No formaldehyde was found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples SL-076-SA8N-SB-4.0-5.0 and DUP10-SA8N-QC-060811 were identified as field duplicates. No formaldehyde was detected in any of the samples.

Santa Susana Field Laboratory
Formaldehyde - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-4.0-5.0 SL-023-SA5DN-SB-20.0-21.0 SL-025-SA5DN-SB-4.0-5.0 SL-025-SA5DN-SB-23.0-24.0 SL-028-SA5DN-SB-4.0-5.0 SL-028-SA5DN-SB-11.5-12.5 SL-051-SA5DN-SB-4.0-5.0 SL-051-SA5DN-SB-14.0-15.0 SL-076-SA8N-SB-4.0-5.0 SL-076-SA8N-SB-7.5-8.5 SL-106-SA8N-SB-2.5-3.5 SL-109-SA8N-SB-4.0-5.0 SL-109-SA8N-SB-9.0-10.0 DUP10-SA8N-QC-060811	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G71 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: ET
2nd Reviewer:

METHOD: HPLC Formaldehyde (EPA SW 846 Method 8315A)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II	Initial calibration	A	%D RSD ≤ 20
III.	Calibration verification/ICV	A	CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	
VIII.	Target compound identification	A	
IX.	Compound quantitation/RL/LOQ/LODs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	ND	D= 9,14
XIII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples:
soil

1	SL-023-SA5DN-SB-4.0-5.0	11	SL-106-SA8N-SB-2.5-3.5	21	PBLK011166	31	
2	SL-023-SA5DN-SB-20.0-21.0	12	SL-109-SA8N-SB-4.0-5.0	22		32	
3	SL-025-SA5DN-SB-4.0-5.0	13	SL-109-SA8N-SB-9.0-10.0	23		33	
4	SL-025-SA5DN-SB-23.0-24.0	14	DUP10-SA8N-QC-060811 D	24		34	
5	SL-028-SA5DN-SB-4.0-5.0	15	SL-076-SA8N-SB-4.0-5.0MS	25		35	
6	SL-028-SA5DN-SB-11.5-12.5	16	SL-076-SA8N-SB-4.0-5.0MSD	26		36	
7	SL-051-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-051-SA5DN-SB-14.0-15.0	18		28		38	
9	SL-076-SA8N-SB-4.0-5.0 D	19		29		39	
10	SL-076-SA8N-SB-7.5-8.5	20		30		40	

Notes:

DC #: 1027761
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of > 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) < 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

DC #: 76277G71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.		✓		
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 26277G7 /
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC _____ HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (W02 std)	Recalculated CF (W02 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	6/16/11	Formaldehyde	6.74X10'	6.74X10'	6.64 X10'	6.64X10'	8.8	8.8
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G71
SDG #: fw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: FD
2nd Reviewer: [illegible]

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv	6/16/11	formaldehyde	2002.000	2024.74	2024.74	1.1	1.1
	23:03							
2	ccv	6/17/11	↓	↓	2024.19	2024.19	1.1	1.1
	0:48							
3	ccv	6/17/11	↓	↓	2020.32	2020.32	0.9	0.9
	2:33							
4								

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: [illegible]

SDG #: see cover

METHOD: ___ GC ~~HPLC~~

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: A

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	3967.5	4245.23	107	107	0

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FZ
2nd Reviewer: A

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(((SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 15 + 16

Compound	Spike Added (ug/kg)		Sample Conc. (ug/kg)	Spike Sample Concentration (ug/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	—	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Formaldehyde	5010	5010	ND	4565.18	4543.51	91	91	92	92	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G7/
SDG #: pc cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: ICS 011166

Compound	Spike Added (ug/Kg)		Spiked Sample Concentration (ug/Kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
formaldehyde	5010	NA	4530.96	NA	90	90	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G1
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: __ GC ✓ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #12 Compound Name Formaldehyde

Concentration = $\frac{158123 \quad (200,000)\ (0.1)}{6.64 \times 10^7 \quad (20)\ (0.872)\ (1000)}$

= 2730.9 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	June 8, 2011
LDC Report Date:	October 7, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE176

Sample Identification

SL-023-SA5DN-SB-20.0-21.0
SL-028-SA5DN-SB-4.0-5.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals. All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination (r^2) was greater than or equal to 0.990 .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the second source calibration standard were less than or equal to 15.0% for unlabeled compounds and less than or equal to 50.0% for labeled compounds.

The percent differences (%D) of the limit of detection verification (LODV) calibration standard were less than or equal to 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Internal Standards

All internal standard areas and retention times were within QC limits.

XI. Target Compound Identifications

All target compound identifications were within validation criteria.

XII. Compound Quantitation and RLs

All compound quantitation and RLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE176	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

XIV. System Performance

The system performance was acceptable.

XV. Overall Assessment

Data flags are summarized at the end of this report if data has been qualified.

XVI. Field Duplicates

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Perchlorate - Data Qualification Summary - SDG DE176

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE176	SL-023-SA5DN-SB-20.0-21.0 SL-028-SA5DN-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and RLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE176

No Sample Data Qualified in this SDG

LDC #: 26277G87 **VALIDATION COMPLETENESS WORKSHEET** Date: 10/6/11
SDG #: DE176 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: LC/MS Perchlorate (EPA SW846 Method 6850)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 6/8/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2 ~~ICV/CCV ≤ 15/50 LODY ≤ 50~~
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 15/50 LODY ≤ 50
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	client specified
VIII.	Laboratory control samples	A	LCS
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation RL/LOQ/LODs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	N	

Note: A = Acceptable
N = Not provided/applicable
SW = See worksheet
ND = No compounds detected
R = Rinsate
FB = Field blank
D = Duplicate
TB = Trip blank
EB = Equipment blank

Validated Samples: SOIL

1	SL-023-SA5DN-SB-20.0-21.0	11	PBLK191166	21		31	
2	SL-028-SA5DN-SB-4.0-5.0	12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 26277487

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [illegible]

LCMS Perchlorate (EPA Method 6850)

Method: ~~Semivolatiles (EPA SW-846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were all percent relative standard deviations (%RSD) ≤ 30% and relative response factors (RRF) > 0.05?			✓	
IV. Continuing calibration				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15/50 and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?			✓	
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix Spike/Matrix Spike Duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 26277G87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
X. Internal standards				
Were internal standard area counts within -50% or +100% of the associated calibration standard?	✓			
Were retention times within + 30 seconds from the associated calibration standard?	✓			
XI. Target Compound Identification				
Were relative retention times (RRT's) within + 0.06 RRT units of the standard?			✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?			✓	
Were chromatogram peaks verified and accounted for?	✓			
XII. Compound Quantitation				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?			✓	
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XIII. Tentatively Identified Compounds (TICs)				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
XIV. System Performance				
System performance was found to be acceptable.	✓			
XV. Overall Assessment of Data				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 26277987
SDG# See cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: EZ
2nd Reviewer: A

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
06/20/2011	LCMS	perchlorate	0.03	0.020	0.0004
			0.04	0.040	0.0016
			0.10	0.100	0.0100
			0.27	0.200	0.0400
			0.41	0.400	0.1600
			1.10	1.000	1.0000
			3.19	2.500	6.2500

Regression Output:		Regression Output:	Reported	
Constant		0.01870		1.8700E-002
Std Err of Y Est		0.03169		
R Squared		0.99949		0.99949
No. of Observations		7.00000		
Degrees of Freedom		4.00000		
X Coefficient(s)	9.669E-001	0.12	0.09670	1.20E-001
Std Err of Coef.	0.060943	0.02		

LDC #: 26277G87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~, Method 6850

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	MSSP/6811010	6/18/11	~~Phenol (1st internal standard)~~ Perchlorate	4	4.42	4.42	11	11
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 46277G8/

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ Method 8270

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 19166

Compound	Spike Added (ug/kg)		Spike Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	104	NA	104	104	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 26277G87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~ 8270

Y N ~~N/A~~ Were all reported results recalculated and verified for all level IV samples?
Y N ~~N/A~~ Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = ( )( )( )( )( ) / ( )( )( )( )( )

= MD

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE177

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	TB-060911	6312180	TB	5030B	8015M	III
09-Jun-2011	TB-060911	6312180	TB	5030B	8260B	III
09-Jun-2011	TB-060911	6312180	TB	5030B	8260B SIM	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3050B	6010B	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3050B	6020	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3060A	7199	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3550B	8082	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3550B	8270C	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	3550B	8270C SIM	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	5035	8260B	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	5035	8260B SIM	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	METHOD	300.0	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	METHOD	314.0	III
09-Jun-2011	SL-050-SA5DN-SB-4.0-5.0	6312177	N	METHOD	7471A	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3050B	6010B	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3050B	6020	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3060A	7199	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3550B	8082	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3550B	8270C	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	3550B	8270C SIM	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	METHOD	300.0	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	METHOD	314.0	III
09-Jun-2011	SL-050-SA5DN-SB-11.2-12.5	6312178	N	METHOD	7471A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3050B	6010B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3050B	6020	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3546	1625C	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8082	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8270C	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	3550B	8270C SIM	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	5035	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	5035	8260B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	5035	8260B SIM	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	8330	8330A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	314.0	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	7471A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	8315A	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0	6312175	N	METHOD	9012B	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0DU	P312175D270338B	DUP	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-4.0-5.0MS	P312175R270353B	MS	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3050B	6010B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3050B	6020	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3060A	7199	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3546	1625C	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8082	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8270C	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	3550B	8270C SIM	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	5035	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	5035	8260B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	5035	8260B SIM	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	8330	8330A	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	300.0	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	314.0	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	7471A	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	8015B	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	8015M	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	8315A	III
09-Jun-2011	SL-040-SA5DN-SB-10.5-11.5	6312176	N	METHOD	9012B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3050B	6010B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3050B	6020	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3060A	7199	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3546	1625C	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8082	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8270C	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	3550B	8270C SIM	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	5035	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	5035	8260B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	5035	8260B SIM	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	300.0	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	314.0	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	7471A	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	8315A	III
09-Jun-2011	SL-039-SA5DN-SB-4.0-5.0	6312173	N	METHOD	9012B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3050B	6010B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3050B	6020	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3060A	7199	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3546	1625C	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8082	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8270C	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	3550B	8270C SIM	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	5035	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	5035	8260B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	5035	8260B SIM	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	8330	8330A	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	300.0	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	314.0	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	7471A	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	8015B	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	8015M	III
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	8315A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-039-SA5DN-SB-11.5-12.5	6312174	N	METHOD	9012B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3050B	6010B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3050B	6020	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3060A	7199	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3546	1625C	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8015B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8015M	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8082	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8270C	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	3550B	8270C SIM	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	5035	8015M	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	5035	8260B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	5035	8260B SIM	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	8330	8330A	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	300.0	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	314.0	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	7471A	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	8015B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	8015M	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	8315A	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0	6312179	N	METHOD	9012B	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0DUP	P312179D271217B	DUP	METHOD	314.0	III
09-Jun-2011	SL-116-SA8N-SB-4.0-5.0MS	P312179R271241B	MS	METHOD	314.0	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	3510C	8015B	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	3510C	8015M	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	3520C	1625C	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	5030B	8015M	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	8330	8330A	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	Gen Prep	300.0	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	Gen Prep	8015B	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	Gen Prep	8015M	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	METHOD	8315A	III
09-Jun-2011	EB17-SA8N-SB-060911	6312181	EB	METHOD	9012B	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	3510C	8015B	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	3510C	8015M	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	3520C	1625C	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	5030B	8015M	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	8330	8330A	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	Gen Prep	300.0	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	Gen Prep	8015B	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	Gen Prep	8015M	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	METHOD	8315A	III
09-Jun-2011	EB16-SA5DN-SB-060911	6312182	EB	METHOD	9012B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3050B	6010B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3050B	6020	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3060A	7199	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3546	1625C	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8082	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8270C	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	3550B	8270C SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	5035	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	5035	8260B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	5035	8260B SIM	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	8330	8330A	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	300.0	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	314.0	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	7471A	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	8315A	III
09-Jun-2011	SL-038-SA5DN-SB-4.0-5.0	6312171	N	METHOD	9012B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3050B	6010B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3050B	6020	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3060A	7199	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3546	1625C	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8082	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8270C	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	3550B	8270C SIM	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	5035	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	5035	8260B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	5035	8260B SIM	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	8330	8330A	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	300.0	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	314.0	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	6850	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	7471A	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	8015B	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	8015M	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	8315A	III
09-Jun-2011	SL-038-SA5DN-SB-10.5-11.5	6312172	N	METHOD	9012B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3060A	7199	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3546	1625C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8082	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8270C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	3550B	8270C SIM	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	5035	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	5035	8260B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	5035	8260B SIM	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	8330	8330A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	300.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	7471A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	8315A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0	6312169	N	METHOD	9012B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0DU	P312169D220259	DUP	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0DU	P312169D220737A	DUP	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0DU	P312169D270647A	DUP	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R220302	MS	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R220739A	MS	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R240320A	MS	METHOD	8315A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R240921A	MS	3550B	8082	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R242159A	MS	8330	8330A	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R260715	MS	3550B	8270C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R261146	MS	3550B	8270C SIM	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R261926	MS	3546	1625C	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R270711A	MS	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-4.0-5.0MS	P312169R320317A	MS	3550B	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3050B	6010B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3050B	6020	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3060A	7199	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3546	1625C	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8082	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8270C	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	3550B	8270C SIM	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	5035	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	5035	8260B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	5035	8260B SIM	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	8330	8330A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	300.0	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	314.0	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	7471A	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	8015B	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	8015M	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	8315A	III
09-Jun-2011	SL-037-SA5DN-SB-11.5-12.5	6312170	N	METHOD	9012B	III

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IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.3	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.97	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.85	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	9.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	23100		6.63	MDL	21.9	PQL	mg/Kg	J	E
BORON	2.56	J	0.394	MDL	5.48	PQL	mg/Kg	U	B
MANGANESE	237		0.0394	MDL	0.548	PQL	mg/Kg	J	E, E
PHOSPHORUS	424		0.383	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2190		12.4	MDL	54.8	PQL	mg/Kg	J	Q
TIN	3.16	J	0.351	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.33	J	0.504	MDL	5.48	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 3:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	30800		7.02	MDL	23.2	PQL	mg/Kg	J	E
MANGANESE	452		0.0418	MDL	0.580	PQL	mg/Kg	J	E, E
PHOSPHORUS	286		0.406	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	4100		13.1	MDL	58.0	PQL	mg/Kg	J	Q
TIN	2.91	J	0.371	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	3.69	J	0.534	MDL	5.80	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-10.5-11.5 ***Collected:*** 6/9/2011 2:20:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15100		6.44	MDL	21.3	PQL	mg/Kg	J	E
BORON	2.26	J	0.383	MDL	5.32	PQL	mg/Kg	U	B
MANGANESE	134		0.0383	MDL	0.532	PQL	mg/Kg	J	E, E
PHOSPHORUS	129		0.372	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1820		12.0	MDL	53.2	PQL	mg/Kg	J	Q
TIN	2.55	J	0.340	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.489	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	30000		6.69	MDL	22.1	PQL	mg/Kg	J	E
MANGANESE	391		0.0398	MDL	0.553	PQL	mg/Kg	J	E, E
PHOSPHORUS	273		0.387	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3890		12.5	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.43	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.29	J	0.509	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17100		6.87	MDL	22.7	PQL	mg/Kg	J	E
BORON	2.61	J	0.409	MDL	5.68	PQL	mg/Kg	U	B
MANGANESE	218		0.0409	MDL	0.568	PQL	mg/Kg	J	E, E
PHOSPHORUS	269		0.397	MDL	11.4	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1950		12.8	MDL	56.8	PQL	mg/Kg	J	Q
TIN	2.56	J	0.363	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.98	J	0.522	MDL	5.68	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	31900		7.07	MDL	23.4	PQL	mg/Kg	J	E
MANGANESE	387		0.0421	MDL	0.584	PQL	mg/Kg	J	E, E
PHOSPHORUS	298		0.409	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	3920		13.2	MDL	58.4	PQL	mg/Kg	J	Q
TIN	3.03	J	0.374	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	4.91	J	0.537	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	2970		6.26	MDL	20.7	PQL	mg/Kg	J	E
BORON	1.93	J	0.373	MDL	5.18	PQL	mg/Kg	U	B
LITHIUM	1.3	J	0.64	MDL	2.1	PQL	mg/Kg	J	Z
MANGANESE	126		0.0373	MDL	0.518	PQL	mg/Kg	J	E, E
PHOSPHORUS	324		0.362	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	459		11.7	MDL	51.8	PQL	mg/Kg	J	Q
TIN	1.83	J	0.331	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.74	J	0.476	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	29900		6.71	MDL	22.2	PQL	mg/Kg	J	E
MANGANESE	372		0.0399	MDL	0.554	PQL	mg/Kg	J	E, E
PHOSPHORUS	259		0.388	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3720		12.5	MDL	55.4	PQL	mg/Kg	J	Q
TIN	3.44	J	0.355	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.28	J	0.510	MDL	5.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-050-SA5DN-SB-11.2-12.5** ***Collected:*** **6/9/2011 9:30:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20100		6.67	MDL	22.1	PQL	mg/Kg	J	E
BORON	4.30	J	0.397	MDL	5.51	PQL	mg/Kg	U	B
MANGANESE	271		0.0397	MDL	0.551	PQL	mg/Kg	J	E, E
PHOSPHORUS	251		0.386	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2990		12.5	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.49	J	0.353	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.83	J	0.507	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: **SL-050-SA5DN-SB-4.0-5.0** ***Collected:*** **6/9/2011 9:25:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	32800		6.78	MDL	22.4	PQL	mg/Kg	J	E
MANGANESE	372		0.0403	MDL	0.560	PQL	mg/Kg	J	E, E
PHOSPHORUS	251		0.392	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	3610		12.7	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.73	J	0.359	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: **SL-116-SA8N-SB-4.0-5.0** ***Collected:*** **6/9/2011 12:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17400		6.84	MDL	22.6	PQL	mg/Kg	J	E
BORON	3.16	J	0.407	MDL	5.65	PQL	mg/Kg	U	B
MANGANESE	212		0.0407	MDL	0.565	PQL	mg/Kg	J	E, E
PHOSPHORUS	490		0.396	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3240		12.8	MDL	56.5	PQL	mg/Kg	J	Q
SODIUM	101	J	6.73	MDL	113	PQL	mg/Kg	J	Z
TIN	2.60	J	0.362	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.73	J	0.520	MDL	5.65	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.161	J	0.0635	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.3		0.0111	MDL	0.217	PQL	mg/Kg	J	Q, A

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0811	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	8.41		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.926		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	29.2		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COPPER	16.8		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
NICKEL	18.1		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0679	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	68.9		0.613	MDL	3.29	PQL	mg/Kg	J	A, Q

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.230	J	0.0679	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.77		0.0123	MDL	0.241	PQL	mg/Kg	J	Q, A

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.17		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
BERYLLIUM	0.848		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	36.2		0.141	MDL	0.468	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	20.6		0.0937	MDL	0.468	PQL	mg/Kg	J	Q
NICKEL	23.9		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.0533	J	0.0166	MDL	0.117	PQL	mg/Kg	J	Z
ZINC	77.3		0.656	MDL	3.51	PQL	mg/Kg	J	A, Q

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.66		0.0108	MDL	0.213	PQL	mg/Kg	J	Q, A

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.165	J	0.0810	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	6.27		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.721		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0777	J	0.0482	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	20.0		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COPPER	9.57		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
NICKEL	11.5		0.110	MDL	0.438	PQL	mg/Kg	J	Q
SILVER	0.0162	J	0.0156	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	47.1		0.613	MDL	3.29	PQL	mg/Kg	J	A, Q

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0674	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	18.3		0.0114	MDL	0.223	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.91		0.0929	MDL	0.465	PQL	mg/Kg	J	Q
BERYLLIUM	1.06		0.0186	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	36.4		0.139	MDL	0.465	PQL	mg/Kg	J	Q
COPPER	21.0		0.0929	MDL	0.465	PQL	mg/Kg	J	Q
NICKEL	27.3		0.116	MDL	0.465	PQL	mg/Kg	J	Q
SILVER	0.0623	J	0.0165	MDL	0.116	PQL	mg/Kg	J	Z
ZINC	105		0.650	MDL	3.48	PQL	mg/Kg	J	A, Q

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.16		0.0111	MDL	0.218	PQL	mg/Kg	J	Q, A

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.133	J	0.0808	MDL	0.218	PQL	mg/Kg	J	Z
ARSENIC	5.50		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.773		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	30.0		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	9.58		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
NICKEL	13.0		0.109	MDL	0.437	PQL	mg/Kg	J	Q
ZINC	48.7		0.611	MDL	3.27	PQL	mg/Kg	J	A, Q

Sample ID: SL-039-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 11:35:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0658	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 11:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.1		0.0119	MDL	0.234	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-039-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 11:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.80		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	1.16		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	44.2		0.136	MDL	0.454	PQL	mg/Kg	J	Q
COPPER	25.0		0.0907	MDL	0.454	PQL	mg/Kg	J	Q
NICKEL	32.3		0.113	MDL	0.454	PQL	mg/Kg	J	Q
SILVER	0.0890	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	107		0.635	MDL	3.40	PQL	mg/Kg	J	A, Q

Sample ID: SL-040-SA5DN-SB-10.5-11.5 **Collected:** 6/9/2011 10:39:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	2.01		0.0106	MDL	0.207	PQL	mg/Kg	J	Q, A

Sample ID: SL-040-SA5DN-SB-10.5-11.5 **Collected:** 6/9/2011 10:39:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.114	J	0.0759	MDL	0.205	PQL	mg/Kg	J	Z
ARSENIC	2.50		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
BERYLLIUM	0.143		0.0164	MDL	0.103	PQL	mg/Kg	J	Q
CADMIUM	0.0879	J	0.0451	MDL	0.103	PQL	mg/Kg	J	Z
CHROMIUM	12.4		0.123	MDL	0.410	PQL	mg/Kg	J	Q
COPPER	2.61		0.0820	MDL	0.410	PQL	mg/Kg	J	Q
NICKEL	6.64		0.103	MDL	0.410	PQL	mg/Kg	J	Q
ZINC	10.1		0.574	MDL	3.08	PQL	mg/Kg	J	A, Q

Sample ID: SL-040-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 10:20:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0656	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 10:20:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	14.1		0.0118	MDL	0.231	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-040-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 10:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.56		0.0904	MDL	0.452	PQL	mg/Kg	J	Q
BERYLLIUM	0.872		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	33.7		0.136	MDL	0.452	PQL	mg/Kg	J	Q
COPPER	18.8		0.0904	MDL	0.452	PQL	mg/Kg	J	Q
NICKEL	25.2		0.113	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0528	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	93.1		0.633	MDL	3.39	PQL	mg/Kg	J	A, Q

Sample ID: SL-050-SA5DN-SB-11.2-12.5 ***Collected:*** 6/9/2011 9:30:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	10.5		0.0110	MDL	0.216	PQL	mg/Kg	J	Q, A

Sample ID: SL-050-SA5DN-SB-11.2-12.5 ***Collected:*** 6/9/2011 9:30:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.85		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.799		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.0		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	14.8		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
NICKEL	22.4		0.109	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0408	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	63.1		0.611	MDL	3.28	PQL	mg/Kg	J	A, Q

Sample ID: SL-050-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 9:25:00 AM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0900	J	0.0656	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 9:25:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.7		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-050-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 9:25:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.198	J	0.0837	MDL	0.226	PQL	mg/Kg	J	Z
ARSENIC	5.57		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
BERYLLIUM	0.892		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	33.3		0.136	MDL	0.453	PQL	mg/Kg	J	Q
COPPER	16.8		0.0905	MDL	0.453	PQL	mg/Kg	J	Q
NICKEL	22.7		0.113	MDL	0.453	PQL	mg/Kg	J	Q
SILVER	0.0407	J	0.0161	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	69.5		0.634	MDL	3.39	PQL	mg/Kg	J	A, Q

Sample ID: SL-116-SA8N-SB-4.0-5.0 ***Collected:*** 6/9/2011 12:25:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0643	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 ***Collected:*** 6/9/2011 12:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	12.5		0.0113	MDL	0.222	PQL	mg/Kg	J	Q, A

Sample ID: SL-116-SA8N-SB-4.0-5.0 ***Collected:*** 6/9/2011 12:25:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.112	J	0.0821	MDL	0.222	PQL	mg/Kg	J	Z
ARSENIC	5.22		0.0887	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.690		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	25.4		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COPPER	14.3		0.0887	MDL	0.444	PQL	mg/Kg	J	Q
NICKEL	16.8		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0783	J	0.0157	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	78.5		0.621	MDL	3.33	PQL	mg/Kg	J	A, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 3:20:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 2:10:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 **Collected:** 6/9/2011 11:45:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 11:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 10:20:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 **Collected:** 6/9/2011 9:25:00 AM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 **Collected:** 6/9/2011 12:25:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.43	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0157	J	0.0073	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0084	J	0.0081	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0332	J	0.0080	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0355	J	0.0078	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0154	J	0.0078	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** AQ

Sample ID: EB16-SA5DN-SB-060911 *Collected:* 6/9/2011 1:00:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	7.95		0.498	MDL	0.995	PQL	ng/L	UJ	B, S

Sample ID: EB17-SA8N-SB-060911 *Collected:* 6/9/2011 12:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	7.17		0.506	MDL	1.01	PQL	ng/L	UJ	B, S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.7	J	18.4	MDL	36.8	PQL	ng/Kg	UJ	S, F

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	42.7		20.3	MDL	40.6	PQL	ng/Kg	J	Q

Method Category: SVOA

Method: 8015M **Matrix:** AQ

Sample ID: EB16-SA5DN-SB-060911 *Collected:* 6/9/2011 1:00:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.13	J	0.10	MDL	0.60	PQL	mg/L	UJ	L, B

Sample ID: EB17-SA8N-SB-060911 *Collected:* 6/9/2011 12:30:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.14	J	0.10	MDL	0.60	PQL	mg/L	UJ	L, B

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.62	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.1	U	6.1	MDL	12	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.49	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.59	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	46		2.3	MDL	7.0	PQL	mg/Kg	U	B

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.51	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	3.2	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	2.3	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.1	J	0.45	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory:** LL

EDD Filename: PrepDE177_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 3:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	20	MDL	410	PQL	ug/Kg	U	B

Sample ID: SL-038-SA5DN-SB-10.5-11.5 ***Collected:*** 6/9/2011 2:20:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-038-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 2:10:00 PM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-039-SA5DN-SB-11.5-12.5 ***Collected:*** 6/9/2011 11:45:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-039-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 11:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-040-SA5DN-SB-10.5-11.5 ***Collected:*** 6/9/2011 10:39:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	180	J	18	MDL	360	PQL	ug/Kg	U	B

Sample ID: SL-040-SA5DN-SB-4.0-5.0 ***Collected:*** 6/9/2011 10:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-050-SA5DN-SB-11.2-12.5 ***Collected:*** 6/9/2011 9:30:00 AM ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	370	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.81	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.90	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.8	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.97	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.91	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.90	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.81	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.7	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.8	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C SIM **Matrix:** SO

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.4	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** AQ

Sample ID: EB17-SA8N-SB-060911 *Collected:* 6/9/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
RDX	0.43	J	0.20	MDL	0.60	PQL	ug/L	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	48	U	48	MDL	140	PQL	ug/Kg	UJ	Q
RDX	60	U	60	MDL	140	PQL	ug/Kg	UJ	Q

Method Category: VOA **Method:** 8015B **Matrix:** AQ

Sample ID: EB16-SA5DN-SB-060911 *Collected:* 6/9/2011 1:00:00 PM *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	210	J	200	MDL	1000	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: PrepDE177_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-037-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 3:30:00 PM *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-037-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 3:20:00 PM *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 2:20:00 PM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.9	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-038-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 2:10:00 PM *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.6	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.13	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-11.5-12.5 *Collected:* 6/9/2011 11:45:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.1	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-039-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 11:35:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.13	J	0.09	MDL	4.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-040-SA5DN-SB-10.5-11.5 *Collected:* 6/9/2011 10:39:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	11		7.0	MDL	8.4	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	3.4	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.22	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 10:20:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.2	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	L, B
TOLUENE	0.17	J	0.08	MDL	4.0	PQL	ug/Kg	J	Z

Sample ID: SL-050-SA5DN-SB-4.0-5.0 *Collected:* 6/9/2011 9:25:00 AM *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.17	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA8N-SB-4.0-5.0 *Collected:* 6/9/2011 12:25:00 *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.22	MDL	3.7	PQL	ug/Kg	UJ	L, B
TOLUENE	0.17	J	0.07	MDL	3.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: PrepDE177_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE177

Method Blank Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA16B260857	6/30/2011 8:57:00 AM	N-NITROSODIMETHYLAMINE	6.03 ng/L	EB16-SA5DN-SB-060911 EB17-SA8N-SB-060911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA5DN-SB-060911(RES)	N-NITROSODIMETHYLAMINE	7.95 ng/L	7.95U ng/L
EB17-SA8N-SB-060911(RES)	N-NITROSODIMETHYLAMINE	7.17 ng/L	7.17U ng/L

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16808BB220244	6/21/2011 2:44:00 AM	ALUMINUM	5.85 mg/Kg	SL-037-SA5DN-SB-11.5-12.5
		BORON	0.868 mg/Kg	SL-037-SA5DN-SB-4.0-5.0
		CALCIUM	14.7 mg/Kg	SL-038-SA5DN-SB-10.5-11.5
		IRON	3.86 mg/Kg	SL-038-SA5DN-SB-4.0-5.0
		MAGNESIUM	0.630 mg/Kg	SL-039-SA5DN-SB-11.5-12.5
		PHOSPHORUS	1.54 mg/Kg	SL-039-SA5DN-SB-4.0-5.0
		STRONTIUM	0.0819 mg/Kg	SL-040-SA5DN-SB-10.5-11.5
		TIN	1.52 mg/Kg	SL-040-SA5DN-SB-4.0-5.0
				SL-050-SA5DN-SB-11.2-12.5
				SL-050-SA5DN-SB-4.0-5.0
				SL-116-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-11.5-12.5(RES)	BORON	2.56 mg/Kg	2.56U mg/Kg
SL-037-SA5DN-SB-11.5-12.5(RES)	TIN	3.16 mg/Kg	3.16U mg/Kg
SL-037-SA5DN-SB-4.0-5.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	BORON	2.26 mg/Kg	2.26U mg/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-038-SA5DN-SB-4.0-5.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	BORON	2.61 mg/Kg	2.61U mg/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-039-SA5DN-SB-4.0-5.0(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	BORON	1.93 mg/Kg	1.93U mg/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	TIN	1.83 mg/Kg	1.83U mg/Kg
SL-040-SA5DN-SB-4.0-5.0(RES)	TIN	3.44 mg/Kg	3.44U mg/Kg
SL-050-SA5DN-SB-11.2-12.5(RES)	BORON	4.30 mg/Kg	4.30U mg/Kg
SL-050-SA5DN-SB-11.2-12.5(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-050-SA5DN-SB-4.0-5.0(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	BORON	3.16 mg/Kg	3.16U mg/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P65651AB320311A	6/18/2011 3:11:00 AM	EFH (C8-C11)	0.11 mg/L	EB16-SA5DN-SB-060911 EB17-SA8N-SB-060911

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB16-SA5DN-SB-060911(REA2)	EFH (C8-C11)	0.13 mg/L	0.60U mg/L
EB17-SA8N-SB-060911(REA2)	EFH (C8-C11)	0.14 mg/L	0.60U mg/L

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P71719AB322215A	6/20/2011 10:15:00 PM	EFH (C30-C40)	2.2 mg/Kg	SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-039-SA5DN-SB-4.0-5.0(REA2)	EFH (C30-C40)	46 mg/Kg	46U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB84B210341A	6/15/2011 3:41:00 AM	ACETONE METHYLENE CHLORIDE	9.0 ug/Kg 1.4 ug/Kg	SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-11.5-12.5(RES)	METHYLENE CHLORIDE	2.0 ug/Kg	3.9U ug/Kg
SL-037-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.1U ug/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	3.9U ug/Kg
SL-038-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.1U ug/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	METHYLENE CHLORIDE	2.1 ug/Kg	3.9U ug/Kg
SL-039-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.2U ug/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	ACETONE	11 ug/Kg	11U ug/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	METHYLENE CHLORIDE	3.4 ug/Kg	4.2U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-040-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.0U ug/Kg
SL-050-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	3.7U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA16B260223	6/23/2011 2:23:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	410U ug/Kg
SL-038-SA5DN-SB-10.5-11.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	370U ug/Kg
SL-038-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	390U ug/Kg
SL-039-SA5DN-SB-11.5-12.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	38 ug/Kg	380U ug/Kg
SL-039-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	390U ug/Kg
SL-040-SA5DN-SB-10.5-11.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	180 ug/Kg	360U ug/Kg
SL-040-SA5DN-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg
SL-050-SA5DN-SB-11.2-12.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	370U ug/Kg
SL-116-SA8N-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	26 ug/Kg	380U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **SO**

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB16-SA5DN-SB-060911 (RES)	6/9/2011 1:00:00 PM	N-NITROSODIMETHYLAMINE	7.95 ng/L	SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-037-SA5DN-SB-11.5-12.5(RES)	N-NITROSODIMETHYLAMINE	27.7 ng/Kg	36.8U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-4.0-5.0)	DIETHYLENE GLYCOL	50	56	59.00-109.00	-	DIETHYLENE GLYCOL	J (all detects) UJ (all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-4.0-5.0)	PETN	-	123	80.00-121.00	-	PETN	J(all detects)
SL-037-SA5DN-SB-4.0-5.0MS (SL-037-SA5DN-SB-4.0-5.0)	1,3,5-TRINITROBENZENE RDX	79 74	- -	82.00-126.00 75.00-129.00	- -	1,3,5-TRINITROBENZENE RDX	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-4.0-5.0)	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	128 201 337	- 131 231	49.00-123.00 49.00-123.00 49.00-123.00	- 23 (20.00) -	EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS (SL-037-SA5DN-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	66	-	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 | Laboratory: LL

EDD Filename: DE177_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM	2397 12445 297 - 146	1692 13631 386 161 129	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM PHOSPHORUS POTASSIUM	J(all detects) Al, Fe, Mg, No Qual, >4x
SL-037-SA5DN-SB-4.0-5.0MS SL-037-SA5DN-SB-4.0-5.0MSD (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	CALCIUM MANGANESE	62 453	288 175	75.00-125.00 75.00-125.00	- 26 (20.00)	CALCIUM MANGANESE	J(all detects) UJ(all non-detects) Ca, Mn, No Qual %R, >4x

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-040-SA5DN-SB-4.0-5.0MS (SL-040-SA5DN-SB-4.0-5.0)	FLUORIDE	35	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-037-SA5DN-SB-11.5-12.5MS SL-037-SA5DN-SB-11.5-12.5MSD (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	TITANIUM	206	284	75.00-125.00	-	TITANIUM	No Qual, >4x

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-037-SA5DN-SB-4.0-5.0MS **SL-037-SA5DN-SB-4.0-5.0MSD** (SL-037-SA5DN-SB-11.5-12.5 SL -037-SA5DN-SB-4.0-5.0 SL -038-SA5DN-SB-10.5-11.5 SL -038-SA5DN-SB-4.0-5.0 SL -039-SA5DN-SB-11.5-12.5 SL -039-SA5DN-SB-4.0-5.0 SL -040-SA5DN-SB-10.5-11.5 SL -040-SA5DN-SB-4.0-5.0 SL -050-SA5DN-SB-11.2-12.5 SL -050-SA5DN-SB-4.0-5.0 SL -116-SA8N-SB-4.0-5.0)	LEAD	235	235	75.00-125.00	-	LEAD	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-037-SA5DN-SB-4.0-5.0DUP	ALUMINUM	22	20.00	
(SL-037-SA5DN-SB-11.5-12.5	BORON	25	20.00	
SL-037-SA5DN-SB-4.0-5.0	MANGANESE	31	20.00	J (all detects) UJ (all non-detects)
SL-038-SA5DN-SB-10.5-11.5				
SL-038-SA5DN-SB-4.0-5.0				
SL-039-SA5DN-SB-11.5-12.5				
SL-039-SA5DN-SB-4.0-5.0				
SL-040-SA5DN-SB-10.5-11.5				B, No Qual, OK by Difference
SL-040-SA5DN-SB-4.0-5.0				
SL-050-SA5DN-SB-11.2-12.5				
SL-050-SA5DN-SB-4.0-5.0				
SL-116-SA8N-SB-4.0-5.0)				

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11651AY320401A (EB16-SA5DN-SB-060911 EB17-SA8N-SB-060911)	EFH (C8-C11)	-	104	46.00-103.00	-	EFH (C8-C11)	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11649AQ241745A (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	2,4,6-TRINITROTOLUENE PETN	121 121	- -	80.00-120.00 80.00-120.00	- -	2,4,6-TRINITROTOLUENE PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16826AQ220936A (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	ANTIMONY	137	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits
P16826AQ220936C (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-11.2-12.5 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	MOLYBDENUM	121	-	80.00-120.00	-	MOLYBDENUM	No Qual, SRM within QC Limits

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE177 Laboratory: LL

EDD Filename: DE177_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB84Q210207A LCSB84Y210231A (SL-037-SA5DN-SB-11.5-12.5 SL-037-SA5DN-SB-4.0-5.0 SL-038-SA5DN-SB-10.5-11.5 SL-038-SA5DN-SB-4.0-5.0 SL-039-SA5DN-SB-11.5-12.5 SL-039-SA5DN-SB-4.0-5.0 SL-040-SA5DN-SB-10.5-11.5 SL-040-SA5DN-SB-4.0-5.0 SL-050-SA5DN-SB-4.0-5.0 SL-116-SA8N-SB-4.0-5.0)	METHYLENE CHLORIDE	128	125	76.00-124.00	-	METHYLENE CHLORIDE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1625C**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB16-SA5DN-SB-060911	N-Nitrosodimethylamine-d6	154	50.00-150.00	All Target Analytes	J (all detects)
EB17-SA8N-SB-060911	N-Nitrosodimethylamine-d6	151	50.00-150.00	All Target Analytes	J(all detects)

Method: **1625C**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-037-SA5DN-SB-11.5-12.5	N-Nitrosodimethylamine-d6	203	50.00-150.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA5DN-SB-060911	METHANOL	J	210	1000	PQL	ug/L	J (all detects)

Method: 8015M

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB16-SA5DN-SB-060911	EFH (C8-C11)	J	0.13	0.60	PQL	mg/L	J (all detects)
EB17-SA8N-SB-060911	EFH (C8-C11)	J	0.14	0.60	PQL	mg/L	J (all detects)

Method: 8330A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB17-SA8N-SB-060911	RDX	J	0.43	0.60	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	N-NITROSODIMETHYLAMINE	J	27.7	36.8	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SB-10.5-11.5	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	BORON	J	2.56	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	3.16	11.0	PQL	mg/Kg	
	Zirconium	J	3.33	5.48	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-4.0-5.0	TIN	J	2.91	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.69	5.80	PQL	mg/Kg	
SL-038-SA5DN-SB-10.5-11.5	BORON	J	2.26	5.32	PQL	mg/Kg	J (all detects)
	TIN	J	2.55	10.6	PQL	mg/Kg	
	Zirconium	J	2.33	5.32	PQL	mg/Kg	
SL-038-SA5DN-SB-4.0-5.0	TIN	J	2.43	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.29	5.53	PQL	mg/Kg	
SL-039-SA5DN-SB-11.5-12.5	BORON	J	2.61	5.68	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	11.4	PQL	mg/Kg	
	Zirconium	J	2.98	5.68	PQL	mg/Kg	
SL-039-SA5DN-SB-4.0-5.0	TIN	J	3.03	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.91	5.84	PQL	mg/Kg	
SL-040-SA5DN-SB-10.5-11.5	BORON	J	1.93	5.18	PQL	mg/Kg	J (all detects)
	LITHIUM	J	1.3	2.1	PQL	mg/Kg	
	TIN	J	1.83	10.4	PQL	mg/Kg	
	Zirconium	J	1.74	5.18	PQL	mg/Kg	
SL-040-SA5DN-SB-4.0-5.0	TIN	J	3.44	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.28	5.54	PQL	mg/Kg	
SL-050-SA5DN-SB-11.2-12.5	BORON	J	4.30	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	2.49	11.0	PQL	mg/Kg	
	Zirconium	J	3.83	5.51	PQL	mg/Kg	
SL-050-SA5DN-SB-4.0-5.0	TIN	J	2.73	11.2	PQL	mg/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	BORON	J	3.16	5.65	PQL	mg/Kg	J (all detects)
	SODIUM	J	101	113	PQL	mg/Kg	
	TIN	J	2.60	11.3	PQL	mg/Kg	
	Zirconium	J	2.73	5.65	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	ANTIMONY	J	0.180	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.161	0.438	PQL	mg/Kg	
	SILVER	J	0.0679	0.110	PQL	mg/Kg	
SL-037-SA5DN-SB-4.0-5.0	SELENIUM	J	0.230	0.468	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0533	0.117	PQL	mg/Kg	
SL-038-SA5DN-SB-10.5-11.5	ANTIMONY	J	0.165	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0777	0.110	PQL	mg/Kg	
	SILVER	J	0.0162	0.110	PQL	mg/Kg	
SL-038-SA5DN-SB-4.0-5.0	SELENIUM	J	0.229	0.465	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0623	0.116	PQL	mg/Kg	
SL-039-SA5DN-SB-11.5-12.5	ANTIMONY	J	0.133	0.218	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	SELENIUM	J	0.113	0.454	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0890	0.113	PQL	mg/Kg	
SL-040-SA5DN-SB-10.5-11.5	ANTIMONY	J	0.114	0.205	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0879	0.103	PQL	mg/Kg	
SL-040-SA5DN-SB-4.0-5.0	SELENIUM	J	0.163	0.452	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0528	0.113	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA5DN-SB-11.2-12.5	SILVER	J	0.0408	0.109	PQL	mg/Kg	J (all detects)
SL-050-SA5DN-SB-4.0-5.0	ANTIMONY	J	0.198	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0900	0.453	PQL	mg/Kg	
	SILVER	J	0.0407	0.113	PQL	mg/Kg	
SL-116-SA8N-SB-4.0-5.0	ANTIMONY	J	0.112	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.444	PQL	mg/Kg	
	SILVER	J	0.0783	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.62	1.2	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-11.5-12.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.63	1.2	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.73	1.2	PQL	mg/Kg	J (all detects)
SL-050-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	MERCURY	J	0.0157	0.104	PQL	mg/Kg	J (all detects)
SL-037-SA5DN-SB-4.0-5.0	MERCURY	J	0.0084	0.115	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	MERCURY	J	0.0332	0.114	PQL	mg/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	MERCURY	J	0.0355	0.110	PQL	mg/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	MERCURY	J	0.0154	0.110	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	EFH (C21-C30)	J	0.62	1.3	PQL	mg/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	EFH (C21-C30)	J	0.49	1.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	0.59	1.3	PQL	mg/Kg	
SL-116-SA8N-SB-4.0-5.0	EFH (C15-C20)	J	0.51	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-038-SA5DN-SB-4.0-5.0	Aroclor 5460	J	3.2	3.8	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	1.4 2.3	2.0 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	AROCLOR 1260	J	1.1	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-11.5-12.5	METHYLENE CHLORIDE TOLUENE	J J	2.0 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-037-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.15	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	METHYLENE CHLORIDE TOLUENE	J J	1.9 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.13	4.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-039-SA5DN-SB-11.5-12.5	METHYLENE CHLORIDE TOLUENE	J J	2.1 0.15	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.8 0.13	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-040-SA5DN-SB-10.5-11.5	METHYLENE CHLORIDE TOLUENE	J J	3.4 0.22	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	2.2 0.17	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-050-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.7 0.17	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.8 0.17	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	410	PQL	ug/Kg	J (all detects)
SL-038-SA5DN-SB-10.5-11.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-038-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	390	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SB-11.5-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	380	PQL	ug/Kg	J (all detects)
SL-039-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	390	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SB-10.5-11.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	180	360	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE177 **Laboratory: LL**

EDD Filename: DE177_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA5DN-SB-11.2-12.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	370	PQL	ug/Kg	J (all detects)
SL-116-SA8N-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-038-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.81	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.90	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	21	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.97	1.9	PQL	ug/Kg	
	PYRENE	J	0.91	1.9	PQL	ug/Kg	
SL-039-SA5DN-SB-11.5-12.5	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.90	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.81	1.9	PQL	ug/Kg	
	PYRENE	J	1.7	1.9	PQL	ug/Kg	
SL-039-SA5DN-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.8	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-040-SA5DN-SB-10.5-11.5	ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
SL-040-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.8	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	1.9	PQL	ug/Kg	

\DC #: 26277H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11

SDG #: DE177 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: MH

2nd Reviewer:

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	N, qual
V.	ICP Interference Check Sample (ICS) Analysis	N	RPD out
VI.	Matrix Spike Analysis	SW	Al, Ca, Fe, Mg, Mn, Ti 4x, Na fail for ZR TCP/MS pb DE178
VII.	Duplicate Sample Analysis	SW	BCKX
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	pb, ZR
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-037-SA5DN-SB-4.0-5.0	11	SL-116-SA8N-SB-4.0-5.0	21		31	
2	SL-037-SA5DN-SB-11.5-12.5	12	#1 MS (TCP, Pb)	22		32	
3	SL-038-SA5DN-SB-4.0-5.0	13	MSD	23		33	
4	SL-038-SA5DN-SB-10.5-11.5	14	Dup	24		34	
5	SL-039-SA5DN-SB-4.0-5.0	15	#2 MS (Ti)	25		35	
6	SL-039-SA5DN-SB-11.5-12.5	16	MSD	26		36	
7	SL-040-SA5DN-SB-4.0-5.0	17	Dup	27		37	
8	SL-040-SA5DN-SB-10.5-11.5	18		28		38	
9	SL-050-SA5DN-SB-4.0-5.0	19		29		39	
10	SL-050-SA5DN-SB-11.2-12.5	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE177
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6312169BKG Matrix Spike Lab Sample ID: 6312169MS Matrix Spike Duplicate Lab Sample ID: 6312169MSD
% Solids for Sample: 82.1
Batch Id(s): P16808B, P17326A

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Aluminum		30765.8802		36490.2116		34729.6367		238.8288	234.2359	MG/KG	2397		1692		5			20	P
Boron		8.1399		225.9953		224.8056		238.8288	234.2359	MG/KG	91		92		1		84 - 115	20	P
Calcium		7114.8274		7412.8048		8465.2406		477.6576	468.4718	MG/KG	62		288		13			20	P
Iron		35285.3848		50147.0684		51249.8032		119.4144	117.1180	MG/KG	12445		13631		2			20	P
[redacted]	208	9.7732		18.1167		18.1773		3.5477	3.5824	MG/KG	[redacted]		[redacted]		0		75 - 125	20	MS
Lithium		24.7584		142.4709		141.4949		119.4144	117.1180	MG/KG	99		100		1		82 - 114	20	P
Magnesium		6792.0271		7501.3768		7696.7875		238.8288	234.2359	MG/KG	297		386		3			20	P
Manganese		451.7847		722.1621		554.5383		59.7072	58.5590	MG/KG	453		175		[redacted]			20	P
[redacted]		286.0704		414.5889		474.9543		119.4144	117.1180	MG/KG	108		[redacted]		14		75 - 125	20	P
[redacted]		4104.1216		5849.6573		5613.7871		1194.1439	1171.1796	MG/KG	[redacted]		129	N	4		75 - 125	20	P
Sodium		327.3511		1433.8683		1433.6890		1194.1439	1171.1796	MG/KG	93		94		0		75 - 125	20	P
Strontium		36.4863		148.0667		146.4092		119.4144	117.1180	MG/KG	93		94		1		75 - 115	20	P
Tin		2.9070	B	402.4719		403.5815		477.6576	468.4718	MG/KG	84		86		0		80 - 110	20	P
Zirconium		3.6866	B	114.2342		112.7003		119.4144	117.1180	MG/KG	93		93		1		75 - 125	20	P

[redacted] qualify the data.

[redacted] + As, Be, Cu, Ni J/UJ (Q) ↓ from SDG DE178

+ Cr J/UJ

DE177 2 of 6

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP/Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE177
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6312170BKG Matrix Spike Lab Sample ID: 6312170MS Matrix Spike Duplicate Lab Sample ID: 6312170MSD
% Solids for Sample: 89.5
Batch Id(s): P17208E

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Titanium		1100.2278		1323.8922		1414.9510		108.4775	110.6256	MG/KG	206		284		7		.	20	P

DE177 12-27

METHODS:
P = ICP Atomic Emission Spectrometer CV = Cold Vapor
MS = ICP Mass Spectrometry AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE177
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6312169BKG
% Solids for Duplicate: 82.1
Batch ID(s): P16808B, P17326A
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6312169DUP
% Solids for Sample: 82.1

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
[redacted]			30765.8802		24700.0470		22	*	P
Boron		5.8	8.1399		6.3530		25		P
Calcium			7114.8274		6972.4678		2		P
Iron			35285.3848		38323.2571		8		P
Lead	208		9.7732		10.1001		3		MS
Lithium			24.7584		21.3408		15		P
Magnesium			6792.0271		6155.7410		10		P
[redacted]			451.7847		330.5725		31	*	P
Phosphorus			286.0704		264.2226		8		P
Potassium			4104.1216		3528.4259		15		P
Sodium		116.0	327.3511		291.7415		12		P
Strontium			36.4863		32.1897		13		P
Tin			2.9070	B	2.7460	B	6		P
Zirconium			3.6866	B	3.0776	B	18		P

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

CRDX

(No fluoride for ICP/MS from SDG DE178)

DE177 4249

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE178

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	TB-061011	6313376	TB	5030B	8015M	III
10-Jun-2011	TB-061011	6313376	TB	5030B	8260B	III
10-Jun-2011	TB-061011	6313376	TB	5030B	8260B SIM	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3050B	6010B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3060A	7199	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3546	1625C	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8082	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8270C	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	3550B	8270C SIM	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	5035	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	5035	8260B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	5035	8260B SIM	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	8330	8330A	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	6850	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	7471A	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	8315A	III
10-Jun-2011	SL-041-SA5DN-SB-9.0-10.0	6313368	N	METHOD	9012B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3050B	6010B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3060A	7199	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3546	1625C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8082	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8270C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	3550B	8270C SIM	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	5035	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	5035	8260B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	5035	8260B SIM	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	8330	8330A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	7471A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	8015B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	8015M	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	8315A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0	6313367	N	METHOD	9012B	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220935	DUP	METHOD	7471A	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942A	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942B	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942C	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D220942D	DUP	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D270452A	DUP	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0DU	P313367D271457A	DUP	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220936	MS	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945A	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945B	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945C	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R220945D	MS	3050B	6020	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R261133	MS	3550B	8270C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R262359	MS	3546	1625C	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R270507A	MS	METHOD	300.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R271520A	MS	METHOD	314.0	III
10-Jun-2011	SL-041-SA5DN-SB-4.0-5.0MS	P313367R321723A	MS	METHOD	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3050B	6010B	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3050B	6020	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3060A	7199	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3546	1625C	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8015B	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8082	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8270C	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	3550B	8270C SIM	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	5035	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	5035	8260B	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	5035	8260B SIM	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	8330	8330A	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	300.0	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	314.0	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	7471A	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	8015B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	8315A	III
10-Jun-2011	SL-045-SA5DN-SB-9.0-10.0	6313370	N	METHOD	9012B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3050B	6010B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3050B	6020	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3060A	7199	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3546	1625C	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8015B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8082	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8270C	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	3550B	8270C SIM	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	5035	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	5035	8260B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	5035	8260B SIM	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	8330	8330A	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	300.0	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	314.0	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	7471A	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	8015B	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	8015M	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	8315A	III
10-Jun-2011	SL-045-SA5DN-SB-4.0-5.0	6313369	N	METHOD	9012B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3050B	6010B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3050B	6020	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3060A	7199	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3546	1625C	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8015B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8015M	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8082	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8270C	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	3550B	8270C SIM	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	5035	8015M	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	5035	8260B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	5035	8260B SIM	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	8330	8330A	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	300.0	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	314.0	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	7471A	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	8015B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	8015M	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	8315A	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0	6313375	N	METHOD	9012B	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0DUP	P313375D272103A	DUP	3060A	7199	III
10-Jun-2011	SL-111-SA8N-SB-3.0-4.0MS	P313375R272029A	MS	3060A	7199	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3050B	6010B	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3050B	6020	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3060A	7199	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3550B	8082	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3550B	8270C	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	3550B	8270C SIM	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	5035	8260B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	5035	8260B SIM	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	METHOD	300.0	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	METHOD	314.0	III
10-Jun-2011	SL-049-SA5DN-SB-4.0-5.0	6313373	N	METHOD	7471A	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3050B	6010B	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3050B	6020	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3060A	7199	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3550B	8082	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3550B	8270C	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	3550B	8270C SIM	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	METHOD	300.0	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	METHOD	314.0	III
10-Jun-2011	SL-049-SA5DN-SB-15.5-16.5	6313374	N	METHOD	7471A	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3050B	6010B	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3050B	6020	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3060A	7199	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3550B	8082	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3550B	8270C	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	3550B	8270C SIM	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	5035	8260B	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	5035	8260B SIM	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	METHOD	300.0	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	METHOD	314.0	III
10-Jun-2011	SL-048-SA5DN-SB-4.0-5.0	6313371	N	METHOD	7471A	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3050B	6010B	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3050B	6020	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3060A	7199	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3550B	8082	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3550B	8270C	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	3550B	8270C SIM	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	METHOD	300.0	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	METHOD	314.0	III
10-Jun-2011	SL-048-SA5DN-SB-11.5-12.5	6313372	N	METHOD	7471A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.6		0.95	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.3	J	0.95	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	13.6		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	12.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.5		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	24.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	22.9		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.88	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	29300		7.07	MDL	23.4	PQL	mg/Kg	J	E
MANGANESE	589		0.0421	MDL	0.584	PQL	mg/Kg	J	E, E
PHOSPHORUS	262		0.409	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	3730		13.2	MDL	58.4	PQL	mg/Kg	J	Q
TIN	2.83	J	0.374	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.31	J	0.538	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	26900		6.55	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	237		0.0390	MDL	0.541	PQL	mg/Kg	J	E, E
PHOSPHORUS	215		0.379	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2920		12.2	MDL	54.1	PQL	mg/Kg	J	Q
TIN	2.54	J	0.347	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.96	J	0.498	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	34000		7.14	MDL	23.6	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	230		0.0425	MDL	0.590	PQL	mg/Kg	J	E, E
PHOSPHORUS	221		0.413	MDL	11.8	PQL	mg/Kg	J	Q
POTASSIUM	3510		13.3	MDL	59.0	PQL	mg/Kg	J	Q
TIN	2.77	J	0.378	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	4.47	J	0.543	MDL	5.90	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	26100		6.69	MDL	22.1	PQL	mg/Kg	J	E
BORON	4.71	J	0.398	MDL	5.53	PQL	mg/Kg	J	Z
MANGANESE	212		0.0398	MDL	0.553	PQL	mg/Kg	J	E, E
PHOSPHORUS	269		0.387	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3060		12.5	MDL	55.3	PQL	mg/Kg	J	Q
TIN	2.51	J	0.354	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.74	J	0.509	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-11.5-12.5 *Collected:* 6/10/2011 3:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18800		6.47	MDL	21.4	PQL	mg/Kg	J	E
BORON	2.21	J	0.385	MDL	5.34	PQL	mg/Kg	U	B
MANGANESE	357		0.0385	MDL	0.534	PQL	mg/Kg	J	E, E
PHOSPHORUS	166		0.374	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1680		12.1	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.57	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.44	J	0.492	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	32200		6.98	MDL	23.1	PQL	mg/Kg	J	E
MANGANESE	392		0.0415	MDL	0.577	PQL	mg/Kg	J	E, E
PHOSPHORUS	430		0.404	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3590		13.0	MDL	57.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-048-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 3:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.75	J	0.369	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SL-049-SA5DN-SB-15.5-16.5 ***Collected:*** 6/10/2011 2:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20100		6.57	MDL	21.7	PQL	mg/Kg	J	E
BORON	3.19	J	0.391	MDL	5.43	PQL	mg/Kg	U	B
MANGANESE	169		0.0391	MDL	0.543	PQL	mg/Kg	J	E, E
PHOSPHORUS	272		0.380	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2890		12.3	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.47	J	0.348	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.85	J	0.500	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 2:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	29800		6.96	MDL	23.0	PQL	mg/Kg	J	E
MANGANESE	493		0.0414	MDL	0.575	PQL	mg/Kg	J	E, E
PHOSPHORUS	275		0.403	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3730		13.0	MDL	57.5	PQL	mg/Kg	J	Q
TIN	2.56	J	0.368	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.91	J	0.529	MDL	5.75	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 ***Collected:*** 6/10/2011 12:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14800		6.50	MDL	21.5	PQL	mg/Kg	J	E
BORON	1.94	J	0.387	MDL	5.37	PQL	mg/Kg	U	B
MANGANESE	115		0.0387	MDL	0.537	PQL	mg/Kg	J	E, E
PHOSPHORUS	250		0.376	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1960		12.1	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	81.9	J	6.39	MDL	107	PQL	mg/Kg	J	Z
TIN	2.50	J	0.344	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.55	J	0.494	MDL	5.37	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0665	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	18.1		0.0119	MDL	0.234	PQL	mg/Kg	J	Q, A

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.70		0.0917	MDL	0.458	PQL	mg/Kg	J	Q
BERYLLIUM	0.861		0.0183	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	40.3		0.138	MDL	0.458	PQL	mg/Kg	J	Q
COPPER	18.4		0.0917	MDL	0.458	PQL	mg/Kg	J	Q
NICKEL	23.9		0.115	MDL	0.458	PQL	mg/Kg	J	Q
SILVER	0.0648	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
ZINC	74.1		0.642	MDL	3.44	PQL	mg/Kg	J	Q, A

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	3.15		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, A

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0809	MDL	0.219	PQL	mg/Kg	J	Z
ARSENIC	2.91		0.0875	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.228		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0853	J	0.0481	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	15.2		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	4.66		0.0875	MDL	0.437	PQL	mg/Kg	J	Q
NICKEL	7.91		0.109	MDL	0.437	PQL	mg/Kg	J	Q
THALLIUM	0.0669	J	0.0328	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	18.6		0.612	MDL	3.28	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0776	J	0.0678	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.0		0.0117	MDL	0.229	PQL	mg/Kg	J	Q, A

Sample ID: SL-045-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.53		0.0935	MDL	0.468	PQL	mg/Kg	J	Q
BERYLLIUM	1.06		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	39.7		0.140	MDL	0.468	PQL	mg/Kg	J	Q
COPPER	20.2		0.0935	MDL	0.468	PQL	mg/Kg	J	Q
NICKEL	23.7		0.117	MDL	0.468	PQL	mg/Kg	J	Q
SILVER	0.0746	J	0.0166	MDL	0.117	PQL	mg/Kg	J	Z
ZINC	75.6		0.655	MDL	3.51	PQL	mg/Kg	J	Q, A

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	11.7		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, A

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.61		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
BERYLLIUM	1.31		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	45.7		0.137	MDL	0.456	PQL	mg/Kg	J	Q
COPPER	21.2		0.0911	MDL	0.456	PQL	mg/Kg	J	Q
NICKEL	33.6		0.114	MDL	0.456	PQL	mg/Kg	J	Q
SILVER	0.0411	J	0.0162	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	86.7		0.638	MDL	3.42	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-048-SA5DN-SB-11.5-12.5 ***Collected:*** 6/10/2011 3:20:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0659	J	0.0632	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-11.5-12.5 ***Collected:*** 6/10/2011 3:20:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.98		0.0110	MDL	0.216	PQL	mg/Kg	J	Q, A

Sample ID: SL-048-SA5DN-SB-11.5-12.5 ***Collected:*** 6/10/2011 3:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.11		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
BERYLLIUM	0.897		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.0972	J	0.0479	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	27.4		0.131	MDL	0.436	PQL	mg/Kg	J	Q
COPPER	12.4		0.0872	MDL	0.436	PQL	mg/Kg	J	Q
NICKEL	18.3		0.109	MDL	0.436	PQL	mg/Kg	J	Q
SILVER	0.0469	J	0.0155	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	51.7		0.610	MDL	3.27	PQL	mg/Kg	J	Q, A

Sample ID: SL-048-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 3:10:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0688	J	0.0663	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 3:10:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	13.2		0.0118	MDL	0.231	PQL	mg/Kg	J	Q, A

Sample ID: SL-048-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 3:10:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.92		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
BERYLLIUM	1.11		0.0183	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	40.7		0.137	MDL	0.457	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	22.6		0.0914	MDL	0.457	PQL	mg/Kg	J	Q
NICKEL	28.8		0.114	MDL	0.457	PQL	mg/Kg	J	Q
SILVER	0.0609	J	0.0162	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	93.6		0.640	MDL	3.43	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.00		0.0113	MDL	0.221	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.82		0.0903	MDL	0.452	PQL	mg/Kg	J	Q
BERYLLIUM	0.793		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	27.6		0.135	MDL	0.452	PQL	mg/Kg	J	Q
COPPER	15.5		0.0903	MDL	0.452	PQL	mg/Kg	J	Q
NICKEL	23.9		0.113	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0361	J	0.0160	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	62.9		0.632	MDL	3.39	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.174	J	0.0667	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	15.7		0.0117	MDL	0.230	PQL	mg/Kg	J	Q, A

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.43		0.0920	MDL	0.460	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.18		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	44.9		0.138	MDL	0.460	PQL	mg/Kg	J	Q
COPPER	23.4		0.0920	MDL	0.460	PQL	mg/Kg	J	Q
NICKEL	31.3		0.115	MDL	0.460	PQL	mg/Kg	J	Q
SILVER	0.0715	J	0.0163	MDL	0.115	PQL	mg/Kg	J	Z
ZINC	99.3		0.644	MDL	3.45	PQL	mg/Kg	J	Q, A

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.175	J	0.0617	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.90		0.0110	MDL	0.215	PQL	mg/Kg	J	Q, A

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0787	MDL	0.213	PQL	mg/Kg	J	Z
ARSENIC	3.69		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.522		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.0584	J	0.0468	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	16.9		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COPPER	6.05		0.0851	MDL	0.425	PQL	mg/Kg	J	Q
NICKEL	8.58		0.106	MDL	0.425	PQL	mg/Kg	J	Q
SILVER	0.0400	J	0.0151	MDL	0.106	PQL	mg/Kg	J	Z
ZINC	41.4		0.595	MDL	3.19	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-048-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 3:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.48	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.62	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0422	J	0.0076	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0151	J	0.0077	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0125	J	0.0074	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q
Propylene glycol	6.0	U	6.0	MDL	12	PQL	mg/Kg	UJ	Q

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	1.2	J	0.95	MDL	2.9	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	7.3		0.45	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-045-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 11:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	5.2		0.46	MDL	1.4	PQL	mg/Kg	U	B

Sample ID: SL-111-SA8N-SB-3.0-4.0 *Collected:* 6/10/2011 12:40:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C30-C40)	4.1		0.44	MDL	1.3	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.6	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-049-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.7	J	0.46	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.6	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 *Collected:* 6/10/2011 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	20	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
1,2-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
1,3-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2,4,5-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,4,6-TRICHLOROPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2,4-DIMETHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,4-DINITROPHENOL	380	U	380	MDL	1100	PQL	ug/Kg	UJ	S
2,4-DINITROTOLUENE	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2,6-DINITROTOLUENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-CHLORONAPHTHALENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-CHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
2-NITROANILINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	S
3-NITROANILINE	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4,6-DINITRO-2-METHYLPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
4-BROMOPHENYL-PHENYLETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-9.0-10.0 *Collected:* 6/10/2011 10:50:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLORO-3-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4-CHLOROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	S
4-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4-METHYLPHENOL	38	U	38	MDL	190	PQL	ug/Kg	UJ	S
4-NITROANILINE	75	U	75	MDL	190	PQL	ug/Kg	UJ	S
4-NITROPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
ANILINE	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	S
BENZOIC ACID	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
BENZYL ALCOHOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
BIS(2-CHLOROETHOXY)METHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
BIS(2-CHLOROETHYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	19	MDL	380	PQL	ug/Kg	J	Z, S
CARBAZOLE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
DIBENZOFURAN	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
HEXACHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
HEXACHLOROBUTADIENE	75	U	75	MDL	190	PQL	ug/Kg	UJ	S
HEXACHLOROCYCLOPENTADIENE	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
HEXACHLOROETHANE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
ISOPHORONE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
NITROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
N-NITROSO-DI-N-PROPYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
N-NITROSODIPHENYLAMINE	19	U	19	MDL	190	PQL	ug/Kg	UJ	S
PENTACHLOROPHENOL	190	U	190	MDL	560	PQL	ug/Kg	UJ	S
PHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	S

Sample ID: SL-049-SA5DN-SB-15.5-16.5 *Collected:* 6/10/2011 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 11:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.51	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.91	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.7	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 ***Collected:*** 6/10/2011 10:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.95	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-15.5-16.5 ***Collected:*** 6/10/2011 2:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.6	J	6.8	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 ***Collected:*** 6/10/2011 2:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.8	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	7.1	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.83	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.80	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory:** LL

EDD Filename: DE178_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-041-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:00:00 **Analysis Type:** RES **Dilution:** 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.27	MDL	4.5	PQL	ug/Kg	UJ	L, B
TOLUENE	0.11	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: SL-041-SA5DN-SB-9.0-10.0 **Collected:** 6/10/2011 10:50:00 **Analysis Type:** RES **Dilution:** 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.4	J	0.26	MDL	4.4	PQL	ug/Kg	UJ	L, B
TOLUENE	0.11	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 11:50:00 **Analysis Type:** RES **Dilution:** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.3	J	0.24	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.09	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-045-SA5DN-SB-9.0-10.0 **Collected:** 6/10/2011 11:40:00 **Analysis Type:** RES **Dilution:** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.9		6.9	MDL	8.3	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.2	J	0.25	MDL	4.2	PQL	ug/Kg	UJ	L, B

Sample ID: SL-048-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 3:10:00 **Analysis Type:** RES **Dilution:** 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.26	MDL	4.2	PQL	ug/Kg	UJ	L, B
TOLUENE	0.10	J	0.09	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-049-SA5DN-SB-4.0-5.0 **Collected:** 6/10/2011 2:10:00 **Analysis Type:** RES **Dilution:** 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.25	MDL	4.1	PQL	ug/Kg	UJ	L, B
TOLUENE	0.15	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

Method: **8260B** ***Matrix:*** **SO**

Sample ID: **SL-111-SA8N-SB-3.0-4.0** ***Collected:*** **6/10/2011 12:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.89**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	1.5	J	0.23	MDL	3.9	PQL	ug/Kg	UJ	L, B
TOLUENE	0.09	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE178

Method Blank Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P16808BB220244	6/21/2011 2:44:00 AM	ALUMINUM	5.85 mg/Kg	SL-041-SA5DN-SB-4.0-5.0
		BORON	0.868 mg/Kg	SL-041-SA5DN-SB-9.0-10.0
		CALCIUM	14.7 mg/Kg	SL-045-SA5DN-SB-4.0-5.0
		IRON	3.86 mg/Kg	SL-045-SA5DN-SB-9.0-10.0
		MAGNESIUM	0.630 mg/Kg	SL-048-SA5DN-SB-11.5-12.5
		PHOSPHORUS	1.54 mg/Kg	SL-048-SA5DN-SB-4.0-5.0
		STRONTIUM	0.0819 mg/Kg	SL-049-SA5DN-SB-15.5-16.5
		TIN	1.52 mg/Kg	SL-049-SA5DN-SB-4.0-5.0
				SL-111-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5DN-SB-4.0-5.0(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SL-041-SA5DN-SB-9.0-10.0(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-045-SA5DN-SB-4.0-5.0(RES)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-045-SA5DN-SB-9.0-10.0(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-048-SA5DN-SB-11.5-12.5(RES)	BORON	2.21 mg/Kg	2.21U mg/Kg
SL-048-SA5DN-SB-11.5-12.5(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-048-SA5DN-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-049-SA5DN-SB-15.5-16.5(RES)	BORON	3.19 mg/Kg	3.19U mg/Kg
SL-049-SA5DN-SB-15.5-16.5(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-049-SA5DN-SB-4.0-5.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-111-SA8N-SB-3.0-4.0(RES)	BORON	1.94 mg/Kg	1.94U mg/Kg
SL-111-SA8N-SB-3.0-4.0(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg

Method: **8015M**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P71719AB322215A	6/20/2011 10:15:00 PM	EFH (C30-C40)	2.2 mg/Kg	SL-041-SA5DN-SB-4.0-5.0
				SL-041-SA5DN-SB-9.0-10.0
				SL-045-SA5DN-SB-4.0-5.0
				SL-045-SA5DN-SB-9.0-10.0
				SL-111-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5DN-SB-9.0-10.0(REA2)	EFH (C30-C40)	7.3 mg/Kg	7.3U mg/Kg
SL-045-SA5DN-SB-9.0-10.0(REA2)	EFH (C30-C40)	5.2 mg/Kg	5.2U mg/Kg
SL-111-SA8N-SB-3.0-4.0(REA2)	EFH (C30-C40)	4.1 mg/Kg	4.1U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB84B210341A	6/15/2011 3:41:00 AM	ACETONE METHYLENE CHLORIDE	9.0 ug/Kg 1.4 ug/Kg	SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.5U ug/Kg
SL-041-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.4 ug/Kg	4.4U ug/Kg
SL-045-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.1U ug/Kg
SL-045-SA5DN-SB-9.0-10.0(RES)	ACETONE	8.9 ug/Kg	8.9U ug/Kg
SL-045-SA5DN-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.2U ug/Kg
SL-048-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-049-SA5DN-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.1U ug/Kg
SL-111-SA8N-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MS SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	44 - -	4 6 6	59.00-109.00 63.00-107.00 63.00-107.00	- - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	ARSENIC BERYLLIUM COPPER NICKEL ZINC	- - - - -	153 133 143 153 200	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ARSENIC BERYLLIUM COPPER NICKEL ZINC	J(all detects)
SL-041-SA5DN-SB-4.0-5.0MS (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	VANADIUM	29	-	75.00-125.00	-	VANADIUM	No Qual, >4x
SL-041-SA5DN-SB-4.0-5.0MS (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	CHROMIUM	35	-	75.00-125.00	-	CHROMIUM	J(all detects) UJ(all non-detects)
SL-041-SA5DN-SB-4.0-5.0MS SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	BARIUM	177	397	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MSD (SL-041-SA5DN-SB-4.0-5.0)	4-CHLOROANILINE	-	-	23.00-95.00	54 (30.00)	4-CHLOROANILINE	J(all detects)

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-041-SA5DN-SB-4.0-5.0MS (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-041-SA5DN-SB-4.0-5.0DUP (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	Nitrate-NO3	29	20.00	No Qual OK by Difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-041-SA5DN-SB-4.0-5.0DUP (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	ANTIMONY SELENIUM	24 22	20.00 20.00	No Qual OK by Difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-111-SA8N-SB-3.0-4.0DUP (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	HEXAVALENT CHROMIUM	38	20.00	No Qual OK by Difference

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE178 Laboratory: LL

EDD Filename: DE178_v1 eQAPP Name: CDM_SSFL_110509

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P11648AQ242114A (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-111-SA8N-SB-3.0-4.0)	PETN	123	-	80.00-120.00	-	PETN	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P16826AQ220936A (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	ANTIMONY	137	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits
P16826AQ220936C (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-11.5-12.5 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-15.5-16.5 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	MOLYBDENUM	121	-	80.00-120.00	-	MOLYBDENUM	No Qual, SRM within QC Limits

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB84Q210207A LCSB84Y210231A (SL-041-SA5DN-SB-4.0-5.0 SL-041-SA5DN-SB-9.0-10.0 SL-045-SA5DN-SB-4.0-5.0 SL-045-SA5DN-SB-9.0-10.0 SL-048-SA5DN-SB-4.0-5.0 SL-049-SA5DN-SB-4.0-5.0 SL-111-SA8N-SB-3.0-4.0)	METHYLENE CHLORIDE	128	125	76.00-124.00	-	METHYLENE CHLORIDE	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-041-SA5DN-SB -9.0-10.0	2,4,6-TRIBROMOPHENOL	21	35.00-130.00	All Target Analytes	
	2-FLUOROBIPHENYL	22	45.00-130.00		
	2-FLUOROPHENOL	22	25.00-130.00		J (all detects)
	Nitrobenzene-d5	22	40.00-130.00		UJ (all non-detects)
	PHENOL-D6	22	25.00-120.00		
	Terphenyl-d14	20	45.00-135.00		

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	Nitrate-NO3	J	1.3	1.8	PQL	mg/Kg	J (all detects)
SL-111-SA8N-SB-3.0-4.0	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	TIN	J	2.83	11.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.31	5.84	PQL	mg/Kg	
SL-041-SA5DN-SB-9.0-10.0	TIN	J	2.54	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.96	5.41	PQL	mg/Kg	
SL-045-SA5DN-SB-4.0-5.0	TIN	J	2.77	11.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.47	5.90	PQL	mg/Kg	
SL-045-SA5DN-SB-9.0-10.0	BORON	J	4.71	5.53	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	11.1	PQL	mg/Kg	
	Zirconium	J	4.74	5.53	PQL	mg/Kg	
SL-048-SA5DN-SB-11.5-12.5	BORON	J	2.21	5.34	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	10.7	PQL	mg/Kg	
	Zirconium	J	3.44	5.34	PQL	mg/Kg	
SL-048-SA5DN-SB-4.0-5.0	TIN	J	2.75	11.5	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-15.5-16.5	BORON	J	3.19	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.47	10.9	PQL	mg/Kg	
	Zirconium	J	3.85	5.43	PQL	mg/Kg	
SL-049-SA5DN-SB-4.0-5.0	TIN	J	2.56	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.91	5.75	PQL	mg/Kg	
SL-111-SA8N-SB-3.0-4.0	BORON	J	1.94	5.37	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.9	107	PQL	mg/Kg	
	TIN	J	2.50	10.7	PQL	mg/Kg	
	Zirconium	J	1.55	5.37	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	SELENIUM	J	0.216	0.458	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0648	0.115	PQL	mg/Kg	
SL-041-SA5DN-SB-9.0-10.0	ANTIMONY	J	0.174	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0853	0.109	PQL	mg/Kg	
	THALLIUM	J	0.0669	0.109	PQL	mg/Kg	
SL-045-SA5DN-SB-4.0-5.0	SELENIUM	J	0.0776	0.468	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0746	0.117	PQL	mg/Kg	
SL-045-SA5DN-SB-9.0-10.0	SILVER	J	0.0411	0.114	PQL	mg/Kg	J (all detects)
SL-048-SA5DN-SB-11.5-12.5	CADMIUM	J	0.0972	0.109	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0659	0.436	PQL	mg/Kg	
	SILVER	J	0.0469	0.109	PQL	mg/Kg	
SL-048-SA5DN-SB-4.0-5.0	SELENIUM	J	0.0688	0.457	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0609	0.114	PQL	mg/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5DN-SB-15.5-16.5	SILVER	J	0.0361	0.113	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-4.0-5.0	SELENIUM	J	0.174	0.460	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0715	0.115	PQL	mg/Kg	
SL-111-SA8N-SB-3.0-4.0	ANTIMONY	J	0.141	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0584	0.106	PQL	mg/Kg	
	SELENIUM	J	0.175	0.425	PQL	mg/Kg	
	SILVER	J	0.0400	0.106	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.2	PQL	mg/Kg	J (all detects)
SL-111-SA8N-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.62	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5DN-SB-15.5-16.5	MERCURY	J	0.0422	0.108	PQL	mg/Kg	J (all detects)
SL-049-SA5DN-SB-4.0-5.0	MERCURY	J	0.0151	0.109	PQL	mg/Kg	J (all detects)
SL-111-SA8N-SB-3.0-4.0	MERCURY	J	0.0125	0.105	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	EFH (C15-C20)	J	1.2	2.9	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-9.0-10.0	AROCLOR 1260	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.6	3.7	PQL	ug/Kg	
SL-049-SA5DN-SB-4.0-5.0	AROCLOR 1260	J	1.7	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.6	3.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	4.5	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.5	PQL	ug/Kg	
SL-041-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.4	4.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.4	PQL	ug/Kg	
SL-045-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.3	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.1	PQL	ug/Kg	
SL-045-SA5DN-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.2	4.2	PQL	ug/Kg	J (all detects)
SL-048-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.10	4.2	PQL	ug/Kg	
SL-049-SA5DN-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.5	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.15	4.1	PQL	ug/Kg	
SL-111-SA8N-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.5	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.9	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	390	PQL	ug/Kg	J (all detects)
SL-041-SA5DN-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)
SL-049-SA5DN-SB-15.5-16.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5DN-SB-4.0-5.0	ANTHRACENE	J	0.51	2.0	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.91	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	2.0	PQL	ug/Kg	
SL-041-SA5DN-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.95	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.83	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.89	1.9	PQL	ug/Kg	
	PYRENE	J	1.7	1.9	PQL	ug/Kg	
SL-049-SA5DN-SB-15.5-16.5	BENZO(A)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.6	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE178 **Laboratory: LL**

EDD Filename: DE178_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-049-SA5DN-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.0	2.0	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.8	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	12	21	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	0.83	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.80	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	

LDC #: 26277I4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/20/11
SDG #: DE178 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	N	
III.	Calibration	N	
IV.	Blanks	A	No final
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	Ba, V, Zn >5X
VII.	Duplicate Sample Analysis	N	Sb, Se, <5X (final Al, Mn, Fe, Mg DB/22)
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Pb, Zn
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-041-SA5DN-SB-4.0-5.0	11	#1 MS (ICP/MS-Pb, Zn)	21		31	
2	SL-041-SA5DN-SB-9.0-10.0	12	MSD	22		32	
3	SL-045-SA5DN-SB-4.0-5.0	13	Dup	23		33	
4	SL-045-SA5DN-SB-9.0-10.0	14		24		34	
5	SL-048-SA5DN-SB-4.0-5.0	15		25		35	
6	SL-048-SA5DN-SB-11.5-12.5	16		26		36	
7	SL-049-SA5DN-SB-4.0-5.0	17		27		37	
8	SL-049-SA5DN-SB-15.5-16.5	18		28		38	
9	SL-111-SA8N-SB-3.0-4.0	19		29		39	
10		20		30		40	

Notes:

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QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: DE178
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6313367BKG Matrix Spike Lab Sample ID: 6313367MS Matrix Spike Duplicate Lab Sample ID: 6313367MSD
% Solids for Sample: 83.9
Batch Id(s): P16826A, P16811C

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Antimony	121	0.2583		1.3964		1.4266		1.3753	1.3753	MG/KG	83		85		2		75 - 125	20	MS
Arsenic	75	5.7028		8.0888		9.2120		2.2921	2.2921	MG/KG	104		153	N	13		75 - 125	20	MS
[redacted]	137	158.7971		179.0364		204.2954		11.4605	11.4605	MG/KG	177		397		13			20	MS
Beryllium	9	0.8607		1.7541		2.0831		0.9168	0.9168	MG/KG	97		133	N	17		75 - 125	20	MS
Cadmium	111	0.4687		1.5630		1.7585		1.1461	1.1461	MG/KG	95		113		12		75 - 125	20	MS
Chromium	52	40.2723		44.2606		49.8991		11.4605	11.4605	MG/KG	35	N	84		12		75 - 125	20	MS
Cobalt	59	11.4743		73.3703		82.4929		57.3026	57.3026	MG/KG	108		124		12		75 - 125	20	MS
Copper	63	18.3987		30.4850		34.7712		11.4605	11.4605	MG/KG	105		143	N	13		75 - 125	20	MS
Mercury		0.0082	U	0.1668		0.1621		0.1983	0.1891	MG/KG	84		86		3		65 - 135	20	CV
Molybdenum	98	0.4389		12.5951		14.3165		11.4605	11.4605	MG/KG	106		121		13		75 - 125	20	MS
Nickel	60	23.8608		36.6966		41.3496		11.4605	11.4605	MG/KG	112		153	N	12		75 - 125	20	MS
Selenium	78	0.2160	B	2.4548		2.7780		2.2921	2.2921	MG/KG	98		112		12		75 - 125	20	MS
Silver	107	0.0648	B	12.2192		13.4065		11.4605	11.4605	MG/KG	106		116		9		75 - 125	20	MS
Thallium	203	0.5102		0.9217		1.0138		0.4584	0.4584	MG/KG	90		110		10		75 - 125	20	MS
Vanadium	51	68.1443		71.4679		81.7365		11.4605	11.4605	MG/KG	29		119		13			20	MS
Zinc	66	74.1267		87.0083		97.0019		11.4605	11.4605	MG/KG	112		200		11			20	MS

+ Pb, P, K J Lt (Q) > 5 hg DZ 1/7
Mn J hu J (RPD, Z)
fully Lt

DE178

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 6
DUPLICATES
SDG No.: DE178
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6313367BKG
% Solids for Duplicate: 83.9
Batch ID(s): P16826A, P16811C
Concentration Units: MG/KG

Duplicate Lab Sample ID: 6313367DUP
% Solids for Sample: 83.9

Analyte	Mass	Control Limit	Samples (S)	C	Duplicate (D)	C	RPD	Q	M
Antimony	121	0.2	0.2583		0.3300		24		MS
Arsenic	75		5.7028		6.5590		14		MS
Barium	137		158.7971		177.4390		11		MS
Beryllium	9		0.8607		1.0043		15		MS
Cadmium	111	0.1	0.4687		0.4003		16		MS
Chromium	52		40.2723		37.4326		7		MS
Cobalt	59		11.4743		13.4271		16		MS
Copper	63		18.3987		20.0687		9		MS
Mercury			0.0082	U	0.0079	U			CV
Molybdenum	98	0.1	0.4389		0.5034		14		MS
Nickel	60		23.8608		27.0714		13		MS
Selenium	78		0.2160	B	0.1727	B	22		MS
Silver	107		0.0648	B	0.0713	B	10		MS
Thallium	203	0.1	0.5102		0.4668		9		MS
Vanadium	51		68.1443		65.6604		4		MS
Zinc	66		74.1267		80.7420		9		MS

NOTE: An asterisk (*) in column "Q" indicates poor duplicate precision (RPD > 20% OR |(S) - (D)| > LOQ for values < 5x LOQ).
The data are considered to be valid because the laboratory control sample is within the control limits. See the Laboratory Control Sample.

Mo. fine

Sb, Se <5X

fine

(Al, Mn for Smp #6177)

DE178 3483

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	FLAGS:
AF = Cold Vapor Atomic Fluorescence	* = Duplicate Out of Spec

SAMPLE DELIVERY GROUP

DE183

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Jun-2011	TB-061711	6320628	TB	5030B	8260B	III
17-Jun-2011	TB-061711	6320628	TB	5030B	8260B SIM	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	3050B	6010B	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	3050B	6020	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	3060A	7199	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	3550B	8082	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	3550B	8270C	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	3550B	8270C SIM	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	5035	8260B	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	5035	8260B SIM	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	METHOD	300.0	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	METHOD	314.0	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5	6320623	N	METHOD	7471A	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5DUP	P320623D270210B	DUP	METHOD	314.0	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5DUP	P320623D271655A	DUP	METHOD	300.0	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5MS	P320623R270257B	MS	METHOD	314.0	III
17-Jun-2011	SL-051-SA8N-SB-7.5-8.5MS	P320623R271709A	MS	METHOD	300.0	III
17-Jun-2011	SL-063-SA8N-SB-6.5	6320627	N	5035	8260B	III
17-Jun-2011	SL-063-SA8N-SB-6.5	6320627	N	5035	8260B SIM	III
17-Jun-2011	SL-059-SA8N-SB-9.0	6320626	N	5035	8260B	III
17-Jun-2011	SL-059-SA8N-SB-9.0	6320626	N	5035	8260B SIM	III
17-Jun-2011	SL-054-SA8N-SB-7.0	6320624	N	5035	8260B	III
17-Jun-2011	SL-054-SA8N-SB-7.0	6320624	N	5035	8260B SIM	III
17-Jun-2011	SL-058-SA8N-SB-7.5	6320625	N	5035	8260B	III
17-Jun-2011	SL-058-SA8N-SB-7.5	6320625	N	5035	8260B SIM	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE183 Laboratory: LL

EDD Filename: DE183_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 6010B **Matrix:** SO

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	6070		2.67	MDL	21.4	PQL	mg/Kg	J	E
PHOSPHORUS	321		0.374	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	5570		12.1	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.97	J	0.342	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1550		0.0759	MDL	1.07	PQL	mg/Kg	J	L

Method Category: METALS **Method:** 6020 **Matrix:** SO

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.316	J	0.0614	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.311		0.0784	MDL	0.212	PQL	mg/Kg	UJ	B, Q
COPPER	21.2		0.0847	MDL	0.424	PQL	mg/Kg	J	E
LEAD	11.8		0.0108	MDL	0.212	PQL	mg/Kg	J	Q, E, E
SILVER	0.0513	J	0.0150	MDL	0.106	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 7199 **Matrix:** SO

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.93	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0084	J	0.0077	MDL	0.109	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: SO**

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.78	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-051-SA8N-SB-7.5-8.5 *Collected:* 6/17/2011 9:50:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	1.9	J	0.13	MDL	4.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.2	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TETRACHLOROETHENE	0.52	J	0.22	MDL	4.5	PQL	ug/Kg	J	Z
TOLUENE	0.17	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z

Sample ID: SL-054-SA8N-SB-7.0 *Collected:* 6/17/2011 3:30:00 *Analysis Type:* RES *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.8	J	0.27	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z
TRICHLOROETHENE	0.97	J	0.17	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-058-SA8N-SB-7.5 *Collected:* 6/17/2011 3:40:00 *Analysis Type:* RES *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.16	J	0.14	MDL	4.6	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE183 **Laboratory:** LL

EDD Filename: DE183_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-058-SA8N-SB-7.5 ***Collected:*** 6/17/2011 3:40:00 ***Analysis Type:*** RES ***Dilution:*** 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.0	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.09	MDL	4.6	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA8N-SB-9.0 ***Collected:*** 6/17/2011 11:35:00 ***Analysis Type:*** RES ***Dilution:*** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.7	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.08	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-063-SA8N-SB-6.5 ***Collected:*** 6/17/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	5.4		0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.5	PQL	ug/Kg	J	Z
TRICHLOROETHENE	1.8	J	0.17	MDL	4.5	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Laboratory Triplicate Precision
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Verification Correlation Coefficient
C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Upper Rejection
E	Laboratory Control Precision
E	Laboratory Duplicate Precision

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation
L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation
R	Continuing Calibration Verification Percent Recovery Lower Rejection
R	Continuing Calibration Verification Percent Recovery Upper Estimation
R	Continuing Calibration Verification Percent Recovery Upper Rejection
R	Continuing Calibration Verification Relative Response Factor
R	Initial Calibration Relative Response Factor
R	Initial Calibration Verification Percent Recovery Lower Estimation
R	Initial Calibration Verification Percent Recovery Lower Rejection
R	Initial Calibration Verification Percent Recovery Upper Estimation
R	Initial Calibration Verification Percent Recovery Upper Rejection
R	Initial Calibration Verification Relative Response Factor
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE183

Method Blank Outlier Report

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P17208BB221009	6/24/2011 10:09:00 AM	IRON MAGNESIUM MANGANESE PHOSPHORUS TIN	4.19 mg/Kg 0.703 mg/Kg 0.0380 mg/Kg 1.71 mg/Kg 1.71 mg/Kg	SL-051-SA8N-SB-7.5-8.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-051-SA8N-SB-7.5-8.5(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg

Method: **6020**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P17226AB220808A	6/22/2011 8:08:00 AM	ANTIMONY	0.101 mg/Kg	SL-051-SA8N-SB-7.5-8.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-051-SA8N-SB-7.5-8.5(RES)	ANTIMONY	0.311 mg/Kg	0.311U mg/Kg

Method: **8260B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB91B211352A	6/20/2011 1:52:00 PM	METHYLENE CHLORIDE	0.87 ug/Kg	SL-051-SA8N-SB-7.5-8.5 SL-054-SA8N-SB-7.0 SL-058-SA8N-SB-7.5 SL-059-SA8N-SB-9.0 SL-063-SA8N-SB-6.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-051-SA8N-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.5U ug/Kg
SL-054-SA8N-SB-7.0(RES)	METHYLENE CHLORIDE	2.8 ug/Kg	4.4U ug/Kg
SL-058-SA8N-SB-7.5(RES)	METHYLENE CHLORIDE	2.0 ug/Kg	4.6U ug/Kg
SL-059-SA8N-SB-9.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.2U ug/Kg
SL-063-SA8N-SB-6.5(RES)	METHYLENE CHLORIDE	5.4 ug/Kg	5.4U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
Matrix: **SO**

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P17226AQ220811A (SL-051-SA8N-SB-7.5-8.5)	ANTIMONY	142	-	80.00-120.00	-	ANTIMONY	No Qual, SRM within QC Limits

Reporting Limit Outliers

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA8N-SB-7.5-8.5	TIN	J	2.97	10.7	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA8N-SB-7.5-8.5	SELENIUM	J	0.316	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0513	0.106	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA8N-SB-7.5-8.5	HEXAVALENT CHROMIUM	J	0.93	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA8N-SB-7.5-8.5	MERCURY	J	0.0084	0.109	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA8N-SB-7.5-8.5	CHLOROFORM	J	1.9	4.5	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	2.2	4.5	PQL	ug/Kg	
	TETRACHLOROETHENE	J	0.52	4.5	PQL	ug/Kg	
	TOLUENE	J	0.17	4.5	PQL	ug/Kg	
SL-054-SA8N-SB-7.0	METHYLENE CHLORIDE	J	2.8	4.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.14	4.4	PQL	ug/Kg	
	TRICHLOROETHENE	J	0.97	4.4	PQL	ug/Kg	
SL-058-SA8N-SB-7.5	CHLOROFORM	J	0.16	4.6	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	2.0	4.6	PQL	ug/Kg	
	TOLUENE	J	0.13	4.6	PQL	ug/Kg	
SL-059-SA8N-SB-9.0	METHYLENE CHLORIDE	J	1.7	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.12	4.2	PQL	ug/Kg	
SL-063-SA8N-SB-6.5	TOLUENE	J	0.11	4.5	PQL	ug/Kg	J (all detects)
	TRICHLOROETHENE	J	1.8	4.5	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE183 **Laboratory: LL**

EDD Filename: DE183_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-051-SA8N-SB-7.5-8.5	BENZO(A)PYRENE	J	0.78	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	

LDC #: 26277N4 **VALIDATION COMPLETENESS WORKSHEET** Date: 9/30/11
SDG #: DE183 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MH
2nd Reviewer: A

METHOD: Metals (EPA SW 846 Method 6010B/6020A/7000)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	A	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	DE179
VII.	Duplicate Sample Analysis	N	✓
VIII.	Laboratory Control Samples (LCS)	SW	See ✓
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	N	
XV	Field Blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples:

1	SL-051-SA8N-SB-7.5-8.5	11		21		31	
2		12		22		32	
3		13		23		33	
4		14		24		34	
5		15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

SAMPLE DELIVERY GROUP

DX068

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Apr-2011	SL-001-SA8N-SS-0.0-0.5	6255802	N	METHOD	1613B	III
11-Apr-2011	SL-002-SA8N-SS-0.0-0.5	6255803	N	METHOD	1613B	III
11-Apr-2011	SL-003-SA8N-SS-0.0-0.5	6255804	N	METHOD	1613B	III
11-Apr-2011	SL-004-SA8N-SS-0.0-0.5	6255805	N	METHOD	1613B	III
11-Apr-2011	SL-005-SA8N-SS-0.0-0.5	6255806	N	METHOD	1613B	III
11-Apr-2011	SL-006-SA8N-SS-0.0-0.5	6255807	N	METHOD	1613B	III
11-Apr-2011	SL-007-SA8N-SS-0.0-0.5	6255808	N	METHOD	1613B	III
11-Apr-2011	SL-008-SA8N-SS-0.0-0.5	6255809	N	METHOD	1613B	III
11-Apr-2011	SL-009-SA8N-SS-0.0-0.5	6255810	N	METHOD	1613B	III
11-Apr-2011	SL-010-SA8N-SS-0.0-0.5	6255811	N	METHOD	1613B	III
11-Apr-2011	SL-011-SA8N-SS-0.0-0.5	6255812	N	METHOD	1613B	III
11-Apr-2011	SL-049-SA8N-SS-0.0-0.5	6255818	N	METHOD	1613B	III
11-Apr-2011	DUP01-SA8N-QC-041111	6255801	FD	METHOD	1613B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5	6255813	N	METHOD	1613B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MS	6255814	MS	METHOD	1613B	III
11-Apr-2011	SL-013-SA8N-SS-0.0-0.5MSD	6255815	MSD	METHOD	1613B	III
11-Apr-2011	SL-014-SA8N-SS-0.0-0.5	6255816	N	METHOD	1613B	III
11-Apr-2011	SL-017-SA8N-SS-0.0-0.5	6255817	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP01-SA8N-QC-041111 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.55	JB	0.0362	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.433	JB	0.0266	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.396	JQ	0.0389	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.07	JB	0.0521	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.60	JB	0.0381	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.534	JB	0.0380	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.741	JB	0.0357	MDL	5.82	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.302	JB	0.0289	MDL	5.82	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.229	JBQ	0.0428	MDL	5.82	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.372	JB	0.0329	MDL	5.82	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.594	JB	0.0277	MDL	5.82	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.542	JB	0.0317	MDL	5.82	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0869	JQ	0.0363	MDL	1.16	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.250	JQ	0.0748	MDL	1.16	PQL	ng/Kg	J	Z, FD
OCDF	8.03	JB	0.0234	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: SL-001-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 9:15:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.19	JB	0.0277	MDL	6.17	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.824	JB	0.0152	MDL	6.17	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.117	JB	0.0145	MDL	6.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.101	JQ	0.0272	MDL	6.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.34	JB	0.0368	MDL	6.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.281	JBQ	0.0273	MDL	6.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.198	JB	0.0276	MDL	6.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.225	JBQ	0.0241	MDL	6.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.142	JB	0.0228	MDL	6.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.116	JB	0.0360	MDL	6.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.239	JBQ	0.0214	MDL	6.17	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.791	JB	0.0343	MDL	6.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0306	JQ	0.0253	MDL	1.23	PQL	ng/Kg	J	Z
OCDF	1.23	JB	0.0212	MDL	12.3	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-002-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.27	JB	0.0170	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.116	JBQ	0.0250	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.217	JB	0.0297	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.648	JB	0.0265	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.626	JB	0.0314	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.255	JB	0.0240	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.462	JB	0.0306	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.152	JBQ	0.0309	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.227	JB	0.0401	MDL	6.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.88	JB	0.0325	MDL	6.18	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.230	JB	0.0252	MDL	6.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.434	JB	0.0809	MDL	1.24	PQL	ng/Kg	U	B
OCDF	2.03	JB	0.0440	MDL	12.4	PQL	ng/Kg	J	Z

Sample ID: SL-003-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.719	JB	0.0139	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0862	JBQ	0.0208	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.188	JBQ	0.0241	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.550	JB	0.0272	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.431	JB	0.0250	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.182	JB	0.0246	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.294	JB	0.0251	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0741	JBQ	0.0296	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.122	JBQ	0.0404	MDL	6.16	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.70	JB	0.0345	MDL	6.16	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.214	JB	0.0236	MDL	6.16	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.508	JB	0.0350	MDL	6.16	PQL	ng/Kg	U	B
OCDF	0.967	JBQ	0.0366	MDL	12.3	PQL	ng/Kg	U	B

Sample ID: SL-004-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.25	JB	0.0129	MDL	5.67	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-004-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 9:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.125	JBQ	0.0199	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.201	JB	0.0270	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.495	JB	0.0227	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.639	JB	0.0279	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.219	JBQ	0.0210	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.412	JBQ	0.0284	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.140	JBQ	0.0275	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.166	JBQ	0.0309	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.59	JB	0.0268	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.285	JBQ	0.0208	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.508	JBQ	0.0308	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.466	JBQ	0.0678	MDL	1.13	PQL	ng/Kg	U	B
OCDF	1.98	JB	0.0286	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: SL-005-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.68	JB	0.0616	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.17	JB	0.0703	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	2.96	JB	0.0751	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	4.40	JB	0.0606	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.91	JB	0.0362	MDL	5.24	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.512	JB	0.0341	MDL	1.05	PQL	ng/Kg	U	B

Sample ID: SL-006-SA8N-SS-0.0-0.5 ***Collected:*** 4/11/2011 10:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.44	JB	0.0224	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.363	JB	0.0344	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.11	JB	0.0440	MDL	5.62	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-006-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.797	JB	0.0296	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.762	JB	0.0276	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	2.09	JB	0.0457	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.372	JB	0.0326	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.836	JB	0.0413	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.514	JB	0.0178	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.998	JB	0.0267	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.746	JB	0.0183	MDL	5.62	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.144	JBQ	0.0275	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.154	JB	0.0254	MDL	1.12	PQL	ng/Kg	U	B
OCDF	1.88	JBQ	0.0345	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: **SL-007-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.01	JB	0.0179	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.288	JB	0.0264	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.529	JB	0.0356	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.869	JB	0.0315	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.44	JB	0.0379	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.502	JB	0.0290	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.846	JB	0.0363	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.359	JB	0.0326	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.617	JB	0.0417	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.716	JB	0.0291	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.593	JB	0.0287	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.894	JBQ	0.0314	MDL	6.00	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.128	JBQ	0.0275	MDL	1.20	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.358	JBQ	0.0708	MDL	1.20	PQL	ng/Kg	U	B
OCDF	2.40	JB	0.0280	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.69	JB	0.0212	MDL	5.41	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-008-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 11:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.297	JB	0.0323	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.309	JB	0.0413	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.817	JB	0.0424	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.614	JB	0.0425	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.332	JB	0.0364	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.454	JB	0.0402	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.326	JB	0.0438	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.344	JB	0.0212	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.358	JBQ	0.0231	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.377	JBQ	0.0365	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.564	JB	0.0250	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0723	JBQ	0.0134	MDL	1.08	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.289	JB	0.0519	MDL	1.08	PQL	ng/Kg	U	B
OCDF	2.40	JB	0.0373	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: **SL-009-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.58	JB	0.0477	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.293	JBQ	0.0159	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0682	JB	0.0198	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0419	JB	0.0209	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.294	JB	0.0202	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.126	JB	0.0215	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0780	JBQ	0.0195	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0828	JB	0.0214	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.101	JB	0.0202	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0767	JB	0.0210	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.185	JB	0.0165	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0900	JBQ	0.0181	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.211	JB	0.0167	MDL	5.77	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0637	JBQ	0.0162	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0588	JB	0.0189	MDL	1.15	PQL	ng/Kg	U	B
OCDD	9.40	JB	0.0274	MDL	11.5	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-009-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.370	JB	0.0278	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-010-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.64	JB	0.0358	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.196	JB	0.0297	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.139	JB	0.0414	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	2.08	JB	0.0841	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.473	JB	0.0373	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.203	JBQ	0.0559	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.373	JB	0.0331	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.277	JB	0.0376	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.219	JB	0.0243	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.193	JB	0.0286	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.258	JB	0.0310	MDL	5.71	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.531	JB	0.0307	MDL	5.71	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0488	JB	0.0185	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.197	JB	0.0857	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	2.55	JB	0.0296	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: **SL-011-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.62	JB	0.0512	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.284	JB	0.0456	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.294	JBQ	0.0668	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.51	JB	0.121	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.25	JB	0.0645	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.416	JB	0.0857	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.770	JB	0.0512	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.311	JBQ	0.0666	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.204	JB	0.0364	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.322	JB	0.0645	MDL	5.90	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.412	JB	0.0473	MDL	5.90	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-011-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 1:10:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	1.02	JB	0.0684	MDL	5.90	PQL	ng/Kg	J	Z
OCDF	9.14	JB	0.0449	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-013-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.542	JB	0.0505	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.425	JB	0.0725	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	2.22	JB	0.0669	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.14	JB	0.0734	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.557	JB	0.0606	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.863	JB	0.0710	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.363	JB	0.0652	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.246	JB	0.0518	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.238	JB	0.0430	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.701	JB	0.0571	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.761	JB	0.0427	MDL	5.74	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0327	JBQ	0.0174	MDL	1.15	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.476	JB	0.0839	MDL	1.15	PQL	ng/Kg	UJ	B, FD
OCDD	672	B	0.0811	MDL	11.5	PQL	ng/Kg	J	Q, Q
OCDF	11.3	JB	0.0377	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-014-SA8N-SS-0.0-0.5 **Collected:** 4/11/2011 2:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.69	JB	0.0301	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.334	JB	0.0117	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.115	JB	0.0222	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0699	JBQ	0.0195	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.170	JB	0.0164	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.132	JB	0.0207	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0666	JB	0.0137	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.124	JBQ	0.0200	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.116	JB	0.0187	MDL	5.68	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-014-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0775	JB	0.0137	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0723	JB	0.0103	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.131	JB	0.0142	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.170	JB	0.0117	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0217	JBQ	0.0115	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0809	JB	0.0180	MDL	1.14	PQL	ng/Kg	U	B
OCDD	11.2	JB	0.0259	MDL	11.4	PQL	ng/Kg	J	Z
OCDF	0.563	JBQ	0.0282	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-017-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 2:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.45	JB	0.0209	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.164	JB	0.0156	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.181	J	0.0314	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.956	JB	0.0449	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.615	JB	0.0298	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.346	JB	0.0321	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.459	JB	0.0251	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.250	JB	0.0210	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.215	JB	0.0328	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.235	JBQ	0.0246	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.473	JB	0.0200	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.13	JB	0.0265	MDL	5.45	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.588	J	0.0638	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	2.89	JB	0.0214	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: **SL-049-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.03	JB	0.0268	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.688	JB	0.0258	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0886	JBQ	0.0178	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.108	J	0.0276	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.527	JB	0.0399	MDL	5.36	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-049-SA8N-SS-0.0-0.5** ***Collected:*** **4/11/2011 1:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,6,7,8-HXCDD	0.176	JB	0.0262	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.117	JBQ	0.0291	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.176	JB	0.0223	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0944	JBQ	0.0168	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0883	JBQ	0.0289	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0850	JB	0.0165	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.240	JB	0.0204	MDL	5.36	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.216	J	0.0426	MDL	1.07	PQL	ng/Kg	J	Z
OCDF	2.30	JB	0.0259	MDL	10.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX068

Method Blank Outlier Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1030B372135	4/15/2011 9:35:00 PM	1,2,3,4,6,7,8-HPCDD	0.206 ng/Kg	DUP01-SA8N-QC-041111
		1,2,3,4,6,7,8-HPCDF	0.261 ng/Kg	SL-001-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0607 ng/Kg	SL-017-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0963 ng/Kg	SL-049-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0356 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0678 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0256 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0928 ng/Kg	
		1,2,3,7,8-PECDD	0.0576 ng/Kg	
		1,2,3,7,8-PECDF	0.0410 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0800 ng/Kg	
		2,3,4,7,8-PECDF	0.0825 ng/Kg	
		OCDD	0.626 ng/Kg	
		OCDF	0.185 ng/Kg	
BLK1110B371312	4/25/2011 1:12:00 PM	1,2,3,4,6,7,8-HPCDD	0.214 ng/Kg	SL-010-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.123 ng/Kg	SL-011-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0603 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0291 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0546 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0354 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0424 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0670 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0880 ng/Kg	
		1,2,3,7,8-PECDD	0.0378 ng/Kg	
		1,2,3,7,8-PECDF	0.0460 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0497 ng/Kg	
		2,3,4,7,8-PECDF	0.0785 ng/Kg	
		2,3,7,8-TCDD	0.0407 ng/Kg	
		2,3,7,8-TCDF	0.0156 ng/Kg	
		OCDD	0.583 ng/Kg	
		OCDF	0.155 ng/Kg	
BLK1180B371344	5/2/2011 1:44:00 PM	1,2,3,4,6,7,8-HPCDD	0.297 ng/Kg	SL-002-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.265 ng/Kg	SL-003-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.143 ng/Kg	SL-004-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.301 ng/Kg	SL-005-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.388 ng/Kg	SL-006-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.282 ng/Kg	SL-007-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.383 ng/Kg	SL-008-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.266 ng/Kg	SL-009-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.292 ng/Kg	SL-013-SA8N-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.603 ng/Kg	SL-014-SA8N-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.683 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.306 ng/Kg	
		2,3,4,7,8-PECDF	0.570 ng/Kg	
		2,3,7,8-TCDD	0.155 ng/Kg	
		2,3,7,8-TCDF	0.160 ng/Kg	
		OCDD	0.436 ng/Kg	
		OCDF	0.269 ng/Kg	
BLK1180B372037	5/9/2011 8:37:00 PM	2,3,7,8-TCDF	0.188 ng/Kg	SL-002-SA8N-SS-0.0-0.5 SL-003-SA8N-SS-0.0-0.5 SL-004-SA8N-SS-0.0-0.5 SL-005-SA8N-SS-0.0-0.5 SL-006-SA8N-SS-0.0-0.5 SL-007-SA8N-SS-0.0-0.5 SL-008-SA8N-SS-0.0-0.5 SL-009-SA8N-SS-0.0-0.5 SL-013-SA8N-SS-0.0-0.5 SL-014-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP01-SA8N-QC-041111(RES)	1,2,3,7,8,9-HXCDF	0.302 ng/Kg	0.302U ng/Kg
DUP01-SA8N-QC-041111(RES)	1,2,3,7,8-PECDD	0.229 ng/Kg	0.229U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-001-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.824 ng/Kg	0.824U ng/Kg
SL-001-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.117 ng/Kg	0.117U ng/Kg
SL-001-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.198 ng/Kg	0.198U ng/Kg
SL-001-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.142 ng/Kg	0.142U ng/Kg
SL-001-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.116 ng/Kg	0.116U ng/Kg
SL-001-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.239 ng/Kg	0.239U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.27 ng/Kg	1.27U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.116 ng/Kg	0.116U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.217 ng/Kg	0.217U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.648 ng/Kg	0.648U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.626 ng/Kg	0.626U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.255 ng/Kg	0.255U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.462 ng/Kg	0.462U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.152 ng/Kg	0.152U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.227 ng/Kg	0.227U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	2.88 ng/Kg	2.88U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.230 ng/Kg	0.230U ng/Kg
SL-002-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.434 ng/Kg	0.434U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.719 ng/Kg	0.719U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0862 ng/Kg	0.0862U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.188 ng/Kg	0.188U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.550 ng/Kg	0.550U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.431 ng/Kg	0.431U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.182 ng/Kg	0.182U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.294 ng/Kg	0.294U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0741 ng/Kg	0.0741U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.122 ng/Kg	0.122U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	2.70 ng/Kg	2.70U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.214 ng/Kg	0.214U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.508 ng/Kg	0.508U ng/Kg
SL-003-SA8N-SS-0.0-0.5(RES)	OCDF	0.967 ng/Kg	0.967U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.25 ng/Kg	1.25U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.125 ng/Kg	0.125U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.201 ng/Kg	0.201U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.495 ng/Kg	0.495U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.639 ng/Kg	0.639U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.219 ng/Kg	0.219U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.412 ng/Kg	0.412U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.166 ng/Kg	0.166U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-004-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	1.59 ng/Kg	1.59U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.285 ng/Kg	0.285U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.508 ng/Kg	0.508U ng/Kg
SL-004-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.466 ng/Kg	0.466U ng/Kg
SL-005-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	1.91 ng/Kg	1.91U ng/Kg
SL-005-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.512 ng/Kg	0.512U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.363 ng/Kg	0.363U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	1.11 ng/Kg	1.11U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.797 ng/Kg	0.797U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.762 ng/Kg	0.762U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.372 ng/Kg	0.372U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.836 ng/Kg	0.836U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.514 ng/Kg	0.514U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.998 ng/Kg	0.998U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.746 ng/Kg	0.746U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.144 ng/Kg	0.144U ng/Kg
SL-006-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.154 ng/Kg	0.154U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.288 ng/Kg	0.288U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.529 ng/Kg	0.529U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.869 ng/Kg	0.869U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.502 ng/Kg	0.502U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.846 ng/Kg	0.846U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.359 ng/Kg	0.359U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.617 ng/Kg	0.617U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.716 ng/Kg	0.716U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.593 ng/Kg	0.593U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.894 ng/Kg	0.894U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.128 ng/Kg	0.128U ng/Kg
SL-007-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.358 ng/Kg	0.358U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.297 ng/Kg	0.297U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.309 ng/Kg	0.309U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.817 ng/Kg	0.817U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.614 ng/Kg	0.614U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.332 ng/Kg	0.332U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.454 ng/Kg	0.454U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.326 ng/Kg	0.326U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.344 ng/Kg	0.344U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.358 ng/Kg	0.358U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.377 ng/Kg	0.377U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.564 ng/Kg	0.564U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-008-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0723 ng/Kg	0.0723U ng/Kg
SL-008-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.289 ng/Kg	0.289U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.293 ng/Kg	0.293U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0682 ng/Kg	0.0682U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0419 ng/Kg	0.0419U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.294 ng/Kg	0.294U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.126 ng/Kg	0.126U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0780 ng/Kg	0.0780U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.0828 ng/Kg	0.0828U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.101 ng/Kg	0.101U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0767 ng/Kg	0.0767U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.185 ng/Kg	0.185U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0900 ng/Kg	0.0900U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.211 ng/Kg	0.211U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0637 ng/Kg	0.0637U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0588 ng/Kg	0.0588U ng/Kg
SL-009-SA8N-SS-0.0-0.5(RES)	OCDF	0.370 ng/Kg	0.370U ng/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.196 ng/Kg	0.196U ng/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.139 ng/Kg	0.139U ng/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.203 ng/Kg	0.203U ng/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.277 ng/Kg	0.277U ng/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.193 ng/Kg	0.193U ng/Kg
SL-010-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0488 ng/Kg	0.0488U ng/Kg
SL-011-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.284 ng/Kg	0.284U ng/Kg
SL-011-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.311 ng/Kg	0.311U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.542 ng/Kg	0.542U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.425 ng/Kg	0.425U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.557 ng/Kg	0.557U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.863 ng/Kg	0.863U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.363 ng/Kg	0.363U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.246 ng/Kg	0.246U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.238 ng/Kg	0.238U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.701 ng/Kg	0.701U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.761 ng/Kg	0.761U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0327 ng/Kg	0.0327U ng/Kg
SL-013-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.476 ng/Kg	0.476U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.334 ng/Kg	0.334U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.115 ng/Kg	0.115U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0699 ng/Kg	0.0699U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.170 ng/Kg	0.170U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.132 ng/Kg	0.132U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0666 ng/Kg	0.0666U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.116 ng/Kg	0.116U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0775 ng/Kg	0.0775U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0723 ng/Kg	0.0723U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.170 ng/Kg	0.170U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0217 ng/Kg	0.0217U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0809 ng/Kg	0.0809U ng/Kg
SL-014-SA8N-SS-0.0-0.5(RES)	OCDF	0.563 ng/Kg	0.563U ng/Kg
SL-017-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-017-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.250 ng/Kg	0.250U ng/Kg
SL-017-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.215 ng/Kg	0.215U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.688 ng/Kg	0.688U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0886 ng/Kg	0.0886U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.176 ng/Kg	0.176U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.117 ng/Kg	0.117U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0944 ng/Kg	0.0944U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0883 ng/Kg	0.0883U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0850 ng/Kg	0.0850U ng/Kg
SL-049-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.240 ng/Kg	0.240U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-013-SA8N-SS-0.0-0.5MSD (SL-013-SA8N-SS-0.0-0.5)	OCDD	-	-43	40.00-135.00	37 (20.00)	OCDD	J (all detects) R (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
MOISTURE	13.9	14.4	4		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-013-SA8N-SS-0.0-0.5	DUP01-SA8N-QC-041111			
1,2,3,4,6,7,8-HPCDD	61.6	44.9	31	50.00	
1,2,3,4,6,7,8-HPCDF	7.59	5.55	31	50.00	
1,2,3,4,7,8,9-HPCDF	0.542	0.433	22	50.00	
1,2,3,4,7,8-HxCDD	0.425	0.396	7	50.00	
1,2,3,4,7,8-HXCDF	2.22	3.07	32	50.00	
1,2,3,6,7,8-HXCDD	2.14	1.60	29	50.00	
1,2,3,6,7,8-HXCDF	0.557	0.534	4	50.00	
1,2,3,7,8,9-HXCDD	0.863	0.741	15	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDF	0.363	0.302	18	50.00	
1,2,3,7,8-PECDD	0.246	0.229	7	50.00	
1,2,3,7,8-PECDF	0.238	0.372	44	50.00	
2,3,4,6,7,8-HXCDF	0.701	0.594	17	50.00	
2,3,4,7,8-PECDF	0.761	0.542	34	50.00	
OCDD	672	462	37	50.00	
OCDF	11.3	8.03	34	50.00	
2,3,7,8-TCDD	0.0327	0.0869	91	50.00	J(all detects)
2,3,7,8-TCDF	0.476	0.250	62	50.00	UJ(all non-detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.46	1.05	PQL	ng/Kg	
DUP01-SA8N-QC-041111	1,2,3,4,6,7,8-HPCDF	JB	5.55	5.82	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.433	5.82	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.396	5.82	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.07	5.82	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.60	5.82	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.534	5.82	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.741	5.82	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.302	5.82	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.229	5.82	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.372	5.82	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.594	5.82	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.542	5.82	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0869	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.250	1.16	PQL	ng/Kg	
	OCDF	JB	8.03	11.6	PQL	ng/Kg	
SL-001-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.19	6.17	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.824	6.17	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.117	6.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.101	6.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.34	6.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.281	6.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.198	6.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.225	6.17	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.142	6.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.116	6.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.239	6.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.791	6.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0306	1.23	PQL	ng/Kg	
	OCDF	JB	1.23	12.3	PQL	ng/Kg	
SL-002-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.27	6.18	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.116	6.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.217	6.18	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.648	6.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.626	6.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.255	6.18	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.462	6.18	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.152	6.18	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.227	6.18	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.88	6.18	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.230	6.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.434	1.24	PQL	ng/Kg	
	OCDF	JB	2.03	12.4	PQL	ng/Kg	
SL-003-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.719	6.16	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0862	6.16	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.188	6.16	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.550	6.16	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.431	6.16	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.182	6.16	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.294	6.16	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0741	6.16	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.122	6.16	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.70	6.16	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.214	6.16	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.508	6.16	PQL	ng/Kg	
	OCDF	JBQ	0.967	12.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-004-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.25	5.67	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.125	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.201	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.495	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.639	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.219	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.412	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.140	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.166	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.59	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.285	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.508	5.67	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.466	1.13	PQL	ng/Kg	
	OCDF	JB	1.98	11.3	PQL	ng/Kg	
SL-005-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.68	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.17	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	2.96	5.24	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	4.40	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.91	5.24	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.512	1.05	PQL	ng/Kg	
SL-006-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.44	5.62	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.363	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.11	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.797	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.762	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.09	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.372	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.836	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.514	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.998	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.746	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.144	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.154	1.12	PQL	ng/Kg	
	OCDF	JBQ	1.88	11.2	PQL	ng/Kg	
SL-007-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.01	6.00	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.288	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.529	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.869	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.44	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.502	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.846	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.359	6.00	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.617	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.716	6.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.593	6.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.894	6.00	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.128	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.358	1.20	PQL	ng/Kg	
	OCDF	JB	2.40	12.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.69	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.297	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.309	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.817	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.614	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.332	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.454	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.326	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.344	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.358	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.377	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.564	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0723	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.289	1.08	PQL	ng/Kg	
	OCDF	JB	2.40	10.8	PQL	ng/Kg	
SL-009-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.58	5.77	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.293	5.77	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0682	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0419	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.294	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.126	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0780	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0828	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.101	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0767	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.185	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0900	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.211	5.77	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0637	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0588	1.15	PQL	ng/Kg	
	OCDD	JB	9.40	11.5	PQL	ng/Kg	
	OCDF	JB	0.370	11.5	PQL	ng/Kg	
SL-010-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.64	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.196	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.139	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.08	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.473	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.203	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.373	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.277	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.219	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.193	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.258	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.531	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0488	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.197	1.14	PQL	ng/Kg	
	OCDF	JB	2.55	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.62	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.284	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.294	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.51	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.25	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.416	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.770	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.311	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.204	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.322	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.412	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.02	5.90	PQL	ng/Kg	
	2,3,7,8-TCDF	J	1.02	1.18	PQL	ng/Kg	
	OCDF	JB	9.14	11.8	PQL	ng/Kg	
SL-013-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.542	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.425	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.22	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.14	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.557	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.863	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.363	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.246	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.238	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.701	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.761	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0327	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.476	1.15	PQL	ng/Kg	
	OCDF	JB	11.3	11.5	PQL	ng/Kg	
SL-014-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.69	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.334	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.115	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0699	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.170	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.132	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0666	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.124	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.116	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0775	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0723	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.131	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.170	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0217	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0809	1.14	PQL	ng/Kg	
	OCDD	JB	11.2	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.563	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX068 **Laboratory: LL**

EDD Filename: DX068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.45	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.164	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.181	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.956	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.615	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.346	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.459	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.250	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.215	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.235	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.473	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.13	5.45	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.588	1.09	PQL	ng/Kg	
	OCDF	JB	2.89	10.9	PQL	ng/Kg	
SL-049-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.03	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.688	5.36	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0886	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.108	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.527	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.176	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.117	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.176	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0944	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0883	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0850	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.240	5.36	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.216	1.07	PQL	ng/Kg	
	OCDF	JB	2.30	10.7	PQL	ng/Kg	

LDC #: 25907S

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: CR
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

(Y) N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Column ~~Associated Samples~~	Qualifications
		SL-005-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	DB-5MS	R/A
			↓		↓
		SL-011-SA8N-SS-0.0-0.5	↓	SP2331	↓

Comments: _____

V:\Validation Worksheets\Dioxin16\OVR16.wpd

SAMPLE DELIVERY GROUP

DX069

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
12-Apr-2011	SL-018-SA8N-SS-0.0-0.5	6256884	N	METHOD	1613B	III
12-Apr-2011	SL-228-SA5A-SB-3.0-4.0	6256900	N	METHOD	1613B	III
12-Apr-2011	SL-016-SA8N-SS-0.0-0.5	6256883	N	METHOD	1613B	III
12-Apr-2011	SL-015-SA8N-SS-0.0-0.5	6256882	N	METHOD	1613B	III
12-Apr-2011	SL-227-SA5A-SB-3.0-4.0	6256899	N	METHOD	1613B	III
12-Apr-2011	SL-048-SA8N-SS-0.0-0.5	6256892	N	METHOD	1613B	III
12-Apr-2011	SL-012-SA8N-SS-0.0-0.5	6256881	N	METHOD	1613B	III
12-Apr-2011	SL-050-SA8N-SS-0.0-0.5	6256893	N	METHOD	1613B	III
12-Apr-2011	SL-019-SA8N-SS-0.0-0.5	6256885	N	METHOD	1613B	III
12-Apr-2011	SL-020-SA8N-SS-0.0-0.5	6256886	N	METHOD	1613B	III
12-Apr-2011	SL-207-SA5A-SB-3.0-4.0	6256898	N	METHOD	1613B	III
12-Apr-2011	SL-021-SA8N-SS-0.0-0.5	6256887	N	METHOD	1613B	III
12-Apr-2011	SL-047-SA8N-SS-0.0-0.5	6256891	N	METHOD	1613B	III
12-Apr-2011	SL-022-SA8N-SS-0.0-0.5	6256888	N	METHOD	1613B	III
12-Apr-2011	SL-023-SA8N-SS-0.0-0.5	6256889	N	METHOD	1613B	III
12-Apr-2011	SL-202-SA5A-SB-3.0-4.0	6256896	N	METHOD	1613B	III
12-Apr-2011	SL-036-SA8N-SS-0.0-0.5	6256890	N	METHOD	1613B	III
12-Apr-2011	SL-131-SA8N-SS-0.0-0.5	6256894	N	METHOD	1613B	III
12-Apr-2011	SL-206-SA5A-SB-4.0-5.0	6256897	N	METHOD	1613B	III
12-Apr-2011	EB01-SA8N-SS-041211	6256895	EB	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB01-SA8N-SS-041211 *Collected:* 4/12/2011 4:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.67	JB	0.347	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	3.88	JB	0.187	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	2.09	JBQ	0.217	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.435	JBQ	0.197	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	1.66	JB	0.212	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	1.11	JBQ	0.200	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.970	JBQ	0.190	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.886	JBQ	0.189	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	1.84	JBQ	0.188	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.642	JBQ	0.205	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.532	JBQ	0.119	MDL	10.4	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.46	JB	0.163	MDL	10.4	PQL	pg/L	U	B
2,3,4,7,8-PECDF	1.11	JB	0.114	MDL	10.4	PQL	pg/L	U	B
2,3,7,8-TCDF	0.177	JBQ	0.139	MDL	2.09	PQL	pg/L	U	B
OCDD	15.2	JB	0.502	MDL	20.9	PQL	pg/L	U	B
OCDF	4.49	JBQ	0.384	MDL	20.9	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 *Collected:* 4/12/2011 10:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.19	JB	0.0355	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.190	JBQ	0.0382	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.154	JBQ	0.0514	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.09	JB	0.0693	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.663	JB	0.0508	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.290	JB	0.0491	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.507	JB	0.0468	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.297	JB	0.0450	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.128	JBQ	0.0279	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.89	JB	0.0512	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.251	JB	0.0388	MDL	5.62	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-012-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.475	JB	0.0531	MDL	5.62	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0210	JBQ	0.0181	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.600	JB	0.170	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	5.05	JB	0.0357	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-015-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.02	JB	0.0745	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.65	JB	0.0606	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.149	JBQ	0.0635	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.120	JBQ	0.0428	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.818	JB	0.0685	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.349	JB	0.0421	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.233	JBQ	0.0498	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.405	JB	0.0385	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.336	JBQ	0.0454	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	JBQ	0.0489	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.83	JB	0.0687	MDL	5.71	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.230	JB	0.0393	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.537	JB	0.0667	MDL	5.71	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0413	JBQ	0.0349	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.229	JBQ	0.190	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	6.95	JB	0.0791	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-016-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.02	JB	0.0323	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.455	JB	0.0345	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.277	JBQ	0.0786	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.60	JB	0.129	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.75	JB	0.0749	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.904	JB	0.0952	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.986	JB	0.0659	MDL	5.64	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-016-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.567	JBQ	0.0794	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.264	JBQ	0.0585	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.648	JB	0.0728	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.62	JBQ	0.0931	MDL	5.64	PQL	ng/Kg	J	Z

Sample ID: SL-018-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 9:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.35	JB	0.0512	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.167	JB	0.0546	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.137	JBQ	0.0632	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.16	JB	0.0921	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.687	JB	0.0592	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.296	JBQ	0.0632	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.545	JB	0.0506	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.262	JBQ	0.0537	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0676	JB	0.0319	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.32	JB	0.0683	MDL	5.77	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.260	JB	0.0469	MDL	5.77	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.614	JB	0.0742	MDL	5.77	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.913	JB	0.220	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	6.40	JB	0.0482	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-019-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.88	JB	0.0274	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.251	JB	0.0240	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.291	JB	0.0480	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.49	JB	0.104	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.22	JB	0.0440	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.586	JB	0.0743	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.745	JB	0.0380	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.361	JB	0.0547	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-019-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.167	JB	0.0324	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	5.83	JB	0.0565	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.373	JB	0.0479	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.09	JB	0.0603	MDL	5.85	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0198	JB	0.0139	MDL	1.17	PQL	ng/Kg	U	B

Sample ID: SL-020-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 11:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.67	JB	0.0905	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.385	JBQ	0.122	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.186	JB	0.101	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.83	JB	0.111	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.02	JB	0.0973	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.467	JB	0.0856	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.646	JB	0.0872	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.296	JB	0.0916	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0970	JB	0.0631	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	5.14	JB	0.121	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.310	JB	0.0773	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.14	JB	0.114	MDL	5.73	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0303	JB	0.0296	MDL	1.15	PQL	ng/Kg	U	B

Sample ID: SL-021-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.56	JB	0.122	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.258	JBQ	0.106	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.159	JB	0.0964	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.31	JBQ	0.120	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.829	JBQ	0.0899	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.234	JBQ	0.0838	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.509	JB	0.0715	MDL	5.44	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-021-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.305	JB	0.0554	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.139	JBQ	0.0482	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.46	JB	0.0850	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.296	JB	0.0513	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.564	JBQ	0.0867	MDL	5.44	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.00	JB	0.254	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-022-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.13	JB	0.0721	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.412	JBQ	0.0828	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.369	JBQ	0.0987	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.72	JB	0.103	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.973	JB	0.0964	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.390	JBQ	0.0758	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.775	JB	0.0905	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.350	JB	0.0696	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.237	JBQ	0.0427	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.59	JB	0.0899	MDL	5.74	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.365	JB	0.0614	MDL	5.74	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.699	JB	0.0902	MDL	5.74	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0389	JBQ	0.0302	MDL	1.15	PQL	ng/Kg	U	B

Sample ID: SL-023-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 2:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.647	JB	0.0727	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.916	JB	0.115	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.25	JB	0.0837	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.07	JB	0.110	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.723	JB	0.0672	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.82	JB	0.0961	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.553	JB	0.0609	MDL	5.81	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-023-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 2:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.531	JB	0.0422	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.05	JB	0.0531	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.911	JB	0.0566	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.815	JB	0.0609	MDL	5.81	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0760	JBQ	0.0230	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.797	JB	0.152	MDL	1.16	PQL	ng/Kg	J	Z

Sample ID: SL-036-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 2:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.64	JB	0.0243	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.174	JB	0.0397	MDL	5.93	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.226	JB	0.0596	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.418	JB	0.0449	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.739	JB	0.0617	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.212	JB	0.0394	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.480	JB	0.0577	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.281	JBQ	0.0464	MDL	5.93	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.179	JB	0.0302	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.162	JB	0.0282	MDL	5.93	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.339	JB	0.0388	MDL	5.93	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.475	JB	0.0297	MDL	5.93	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0397	J	0.0190	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.316	J	0.0596	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	5.47	JB	0.0386	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: SL-047-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.85	JB	0.0216	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.154	JB	0.0308	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.151	JB	0.0564	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.04	JB	0.0487	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.485	JB	0.0584	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.167	JB	0.0417	MDL	5.83	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-047-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 1:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.374	JB	0.0555	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.246	JB	0.0474	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.101	JBQ	0.0276	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.145	JB	0.0433	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.221	JB	0.0427	MDL	5.83	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.552	JB	0.0455	MDL	5.83	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.658	J	0.108	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	10.2	JB	0.0377	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-048-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.14	JB	0.0407	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.77	JB	0.0263	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.127	JB	0.0300	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0971	JB	0.0335	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.718	JB	0.0483	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.351	JB	0.0333	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.140	JBQ	0.0408	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.370	JB	0.0316	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.230	JBQ	0.0339	MDL	6.29	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0929	JB	0.0239	MDL	6.29	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.378	JB	0.0344	MDL	6.29	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.209	JB	0.0299	MDL	6.29	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.431	JB	0.0363	MDL	6.29	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.669	J	0.0868	MDL	1.26	PQL	ng/Kg	J	Z
OCDF	7.83	JB	0.0435	MDL	12.6	PQL	ng/Kg	J	Z

Sample ID: SL-050-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.83	JB	0.0335	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.113	JB	0.0437	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.118	JBQ	0.0366	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.684	JB	0.0480	MDL	5.84	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-050-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 10:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.391	JBQ	0.0376	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.142	JBQ	0.0348	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.329	JBQ	0.0333	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.135	JBQ	0.0377	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0624	JB	0.0210	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.727	JBQ	0.0403	MDL	5.84	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.160	JB	0.0310	MDL	5.84	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.404	JB	0.0401	MDL	5.84	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.499	JB	0.104	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	6.61	JB	0.0483	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-131-SA8N-SS-0.0-0.5 ***Collected:*** 4/12/2011 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.503	JB	0.0737	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.885	JB	0.165	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.61	JB	0.110	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.92	JB	0.173	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.619	JBQ	0.0918	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.85	JB	0.159	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.609	JB	0.0934	MDL	5.70	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.66	JB	0.111	MDL	5.70	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.697	JB	0.0820	MDL	5.70	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.27	JB	0.0994	MDL	5.70	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0516	JBQ	0.0351	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.442	JB	0.277	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.98	JB	0.0499	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.307	JBQ	0.0180	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0274	JBQ	0.0199	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0500	JBQ	0.0236	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0390	JBQ	0.0159	MDL	5.81	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-202-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 2:14:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.171	JBQ	0.0228	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0420	JBQ	0.0115	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.300	JB	0.0208	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0378	JB	0.0101	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0427	JBQ	0.0157	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0243	JBQ	0.00815	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0269	JBQ	0.00873	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0539	JB	0.00780	MDL	5.81	PQL	ng/Kg	U	B
OCDF	0.351	JB	0.0335	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-206-SA5A-SB-4.0-5.0 ***Collected:*** 4/12/2011 3:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.272	JB	0.0167	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0725	JB	0.00745	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0183	JB	0.0124	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0371	JB	0.0113	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0258	JBQ	0.0118	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0197	JBQ	0.00813	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0581	JBQ	0.0107	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0388	JB	0.00905	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0321	JBQ	0.0137	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0481	JB	0.00664	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0197	JBQ	0.00756	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0489	JBQ	0.00722	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0183	JBQ	0.0103	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.870	JB	0.0298	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.165	JB	0.0267	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.230	JBQ	0.0199	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0278	JBQ	0.00801	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0146	JBQ	0.0104	MDL	5.31	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-207-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 12:03:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.0382	JBQ	0.0135	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0384	JB	0.0139	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0521	JBQ	0.00988	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0761	JBQ	0.0128	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0435	JBQ	0.00977	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0993	JBQ	0.0147	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.106	JB	0.00812	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0257	JB	0.00834	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0907	JBQ	0.00856	MDL	5.31	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0332	JB	0.0157	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0194	JBQ	0.0125	MDL	1.06	PQL	ng/Kg	J	Z
OCDD	0.624	JB	0.0293	MDL	10.6	PQL	ng/Kg	U	B
OCDF	0.0867	JB	0.0229	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: SL-227-SA5A-SB-3.0-4.0 ***Collected:*** 4/12/2011 10:13:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.552	JBQ	0.0293	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0511	JB	0.0109	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0311	JBQ	0.0153	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0274	JBQ	0.0142	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0199	JBQ	0.0145	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0212	JBQ	0.0104	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0208	JBQ	0.0141	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0142	JBQ	0.0125	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0216	JBQ	0.0186	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0406	JBQ	0.0109	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0180	JBQ	0.0102	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0408	JBQ	0.0110	MDL	5.72	PQL	ng/Kg	U	B
OCDD	3.57	JB	0.0518	MDL	11.4	PQL	ng/Kg	J	Z
OCDF	0.121	JB	0.0281	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-228-SA5A-SB-3.0-4.0** ***Collected:*** **4/12/2011 9:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,4,6,7,8-HPCDD	2.10	JB	0.0428	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.452	JB	0.0202	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0985	JB	0.0259	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0384	JBQ	0.0187	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.268	JB	0.0221	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.109	JB	0.0187	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0558	JBQ	0.0161	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.106	JB	0.0171	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0593	JBQ	0.0170	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0355	JBQ	0.0170	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.121	JB	0.0156	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0487	JB	0.0146	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0665	JBQ	0.0156	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0219	JBQ	0.0147	MDL	1.14	PQL	ng/Kg	U	B
OCDF	2.20	JB	0.0366	MDL	11.4	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX069

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B370125	4/24/2011 1:25:00 AM	1,2,3,4,6,7,8-HPCDD	7.94 pg/L	EB01-SA8N-SS-041211
		1,2,3,4,6,7,8-HPCDF	4.55 pg/L	
		1,2,3,4,7,8,9-HPCDF	2.38 pg/L	
		1,2,3,4,7,8-HxCDD	1.28 pg/L	
		1,2,3,4,7,8-HXCDF	1.50 pg/L	
		1,2,3,6,7,8-HXCDD	1.08 pg/L	
		1,2,3,6,7,8-HXCDF	1.21 pg/L	
		1,2,3,7,8,9-HXCDD	1.65 pg/L	
		1,2,3,7,8,9-HXCDF	1.98 pg/L	
		1,2,3,7,8-PECDD	0.899 pg/L	
		1,2,3,7,8-PECDF	0.844 pg/L	
		2,3,4,6,7,8-HXCDF	1.71 pg/L	
		2,3,4,7,8-PECDF	1.28 pg/L	
		2,3,7,8-TCDD	0.264 pg/L	
		2,3,7,8-TCDF	0.147 pg/L	
		OCDD	47.4 pg/L	
		OCDF	6.44 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB01-SA8N-SS-041211(RES)	1,2,3,4,6,7,8-HPCDD	5.67 pg/L	5.67U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,6,7,8-HPCDF	3.88 pg/L	3.88U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,7,8,9-HPCDF	2.09 pg/L	2.09U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,7,8-HxCDD	0.435 pg/L	0.435U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,4,7,8-HXCDF	1.66 pg/L	1.66U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,6,7,8-HXCDD	1.11 pg/L	1.11U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,6,7,8-HXCDF	0.970 pg/L	0.970U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8,9-HXCDD	0.886 pg/L	0.886U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8,9-HXCDF	1.84 pg/L	1.84U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8-PECDD	0.642 pg/L	0.642U pg/L
EB01-SA8N-SS-041211(RES)	1,2,3,7,8-PECDF	0.532 pg/L	0.532U pg/L
EB01-SA8N-SS-041211(RES)	2,3,4,6,7,8-HXCDF	1.46 pg/L	1.46U pg/L
EB01-SA8N-SS-041211(RES)	2,3,4,7,8-PECDF	1.11 pg/L	1.11U pg/L
EB01-SA8N-SS-041211(RES)	2,3,7,8-TCDF	0.177 pg/L	0.177U pg/L
EB01-SA8N-SS-041211(RES)	OCDD	15.2 pg/L	15.2U pg/L
EB01-SA8N-SS-041211(RES)	OCDF	4.49 pg/L	4.49U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1040B370309	4/22/2011 3:09:00 AM	2,3,7,8-TCDF	0.0903 ng/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0
BLK1040B371258	4/18/2011 12:58:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.283 ng/Kg 0.142 ng/Kg 0.0718 ng/Kg 0.0164 ng/Kg 0.0381 ng/Kg 0.0350 ng/Kg 0.0395 ng/Kg 0.0407 ng/Kg 0.0772 ng/Kg 0.0215 ng/Kg 0.0278 ng/Kg 0.0547 ng/Kg 0.0682 ng/Kg 0.0224 ng/Kg 0.0259 ng/Kg 0.584 ng/Kg 0.198 ng/Kg	SL-012-SA8N-SS-0.0-0.5 SL-015-SA8N-SS-0.0-0.5 SL-016-SA8N-SS-0.0-0.5 SL-018-SA8N-SS-0.0-0.5 SL-019-SA8N-SS-0.0-0.5 SL-020-SA8N-SS-0.0-0.5 SL-021-SA8N-SS-0.0-0.5 SL-022-SA8N-SS-0.0-0.5 SL-023-SA8N-SS-0.0-0.5 SL-050-SA8N-SS-0.0-0.5 SL-131-SA8N-SS-0.0-0.5 SL-202-SA5A-SB-3.0-4.0 SL-206-SA5A-SB-4.0-5.0 SL-207-SA5A-SB-3.0-4.0 SL-227-SA5A-SB-3.0-4.0 SL-228-SA5A-SB-3.0-4.0
BLK1180B370615	5/3/2011 6:15:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.221 ng/Kg 0.104 ng/Kg 0.0661 ng/Kg 0.0208 ng/Kg 0.0521 ng/Kg 0.0353 ng/Kg 0.0335 ng/Kg 0.0254 ng/Kg 0.0904 ng/Kg 0.0182 ng/Kg 0.0263 ng/Kg 0.0685 ng/Kg 0.0537 ng/Kg 0.477 ng/Kg 0.210 ng/Kg	SL-036-SA8N-SS-0.0-0.5 SL-047-SA8N-SS-0.0-0.5 SL-048-SA8N-SS-0.0-0.5

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-012-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.190 ng/Kg	0.190U ng/Kg
SL-012-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.297 ng/Kg	0.297U ng/Kg
SL-012-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-012-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0210 ng/Kg	0.0210U ng/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.149 ng/Kg	0.149U ng/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.336 ng/Kg	0.336U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-015-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.230 ng/Kg	0.230U ng/Kg
SL-015-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.167 ng/Kg	0.167U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.262 ng/Kg	0.262U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0676 ng/Kg	0.0676U ng/Kg
SL-018-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.260 ng/Kg	0.260U ng/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.251 ng/Kg	0.251U ng/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.361 ng/Kg	0.361U ng/Kg
SL-019-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0198 ng/Kg	0.0198U ng/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.296 ng/Kg	0.296U ng/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0970 ng/Kg	0.0970U ng/Kg
SL-020-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0303 ng/Kg	0.0303U ng/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.258 ng/Kg	0.258U ng/Kg
SL-021-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.305 ng/Kg	0.305U ng/Kg
SL-022-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.350 ng/Kg	0.350U ng/Kg
SL-022-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0389 ng/Kg	0.0389U ng/Kg
SL-023-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0760 ng/Kg	0.0760U ng/Kg
SL-036-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.174 ng/Kg	0.174U ng/Kg
SL-036-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.281 ng/Kg	0.281U ng/Kg
SL-036-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.339 ng/Kg	0.339U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.154 ng/Kg	0.154U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.246 ng/Kg	0.246U ng/Kg
SL-047-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.221 ng/Kg	0.221U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.127 ng/Kg	0.127U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0971 ng/Kg	0.0971U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.230 ng/Kg	0.230U ng/Kg
SL-048-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.209 ng/Kg	0.209U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.113 ng/Kg	0.113U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.142 ng/Kg	0.142U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0624 ng/Kg	0.0624U ng/Kg
SL-050-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.160 ng/Kg	0.160U ng/Kg
SL-131-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0516 ng/Kg	0.0516U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.307 ng/Kg	0.307U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0274 ng/Kg	0.0274U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0500 ng/Kg	0.0500U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0390 ng/Kg	0.0390U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.171 ng/Kg	0.171U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0420 ng/Kg	0.0420U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0378 ng/Kg	0.0378U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0427 ng/Kg	0.0427U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0243 ng/Kg	0.0243U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0269 ng/Kg	0.0269U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0539 ng/Kg	0.0539U ng/Kg
SL-202-SA5A-SB-3.0-4.0(RES)	OCDF	0.351 ng/Kg	0.351U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.272 ng/Kg	0.272U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0183 ng/Kg	0.0183U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0371 ng/Kg	0.0371U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0258 ng/Kg	0.0258U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0581 ng/Kg	0.0581U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0388 ng/Kg	0.0388U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0321 ng/Kg	0.0321U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0481 ng/Kg	0.0481U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0197 ng/Kg	0.0197U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0489 ng/Kg	0.0489U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	OCDD	0.870 ng/Kg	0.870U ng/Kg
SL-206-SA5A-SB-4.0-5.0(RES)	OCDF	0.165 ng/Kg	0.165U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.230 ng/Kg	0.230U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0278 ng/Kg	0.0278U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0146 ng/Kg	0.0146U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0382 ng/Kg	0.0382U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0384 ng/Kg	0.0384U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0521 ng/Kg	0.0521U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0761 ng/Kg	0.0761U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0435 ng/Kg	0.0435U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0993 ng/Kg	0.0993U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.106 ng/Kg	0.106U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0257 ng/Kg	0.0257U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0907 ng/Kg	0.0907U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0332 ng/Kg	0.0332U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: PrepDX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-207-SA5A-SB-3.0-4.0(RES)	OCDD	0.624 ng/Kg	0.624U ng/Kg
SL-207-SA5A-SB-3.0-4.0(RES)	OCDF	0.0867 ng/Kg	0.0867U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.552 ng/Kg	0.552U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0511 ng/Kg	0.0511U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0311 ng/Kg	0.0311U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0274 ng/Kg	0.0274U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0199 ng/Kg	0.0199U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0212 ng/Kg	0.0212U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0208 ng/Kg	0.0208U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0142 ng/Kg	0.0142U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0216 ng/Kg	0.0216U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0406 ng/Kg	0.0406U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0408 ng/Kg	0.0408U ng/Kg
SL-227-SA5A-SB-3.0-4.0(RES)	OCDF	0.121 ng/Kg	0.121U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.452 ng/Kg	0.452U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0985 ng/Kg	0.0985U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0384 ng/Kg	0.0384U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.109 ng/Kg	0.109U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0558 ng/Kg	0.0558U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.106 ng/Kg	0.106U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0593 ng/Kg	0.0593U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.121 ng/Kg	0.121U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0487 ng/Kg	0.0487U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0665 ng/Kg	0.0665U ng/Kg
SL-228-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0219 ng/Kg	0.0219U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA8N-SS-041211	1,2,3,4,6,7,8-HPCDD	JB	5.67	10.4	PQL	pg/L	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	3.88	10.4	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	2.09	10.4	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.435	10.4	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	1.66	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	1.11	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.970	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.886	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JBQ	1.84	10.4	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.642	10.4	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.532	10.4	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.46	10.4	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	1.11	10.4	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.177	2.09	PQL	pg/L	
	OCDD	JB	15.2	20.9	PQL	pg/L	
	OCDF	JBQ	4.49	20.9	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.69	1.13	PQL	ng/Kg	
SL-020-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.22	1.15	PQL	ng/Kg	
SL-012-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.19	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.190	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.154	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.09	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.663	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.290	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.507	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.297	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.128	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.89	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.251	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.475	5.62	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0210	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.600	1.12	PQL	ng/Kg	
	OCDF	JB	5.05	11.2	PQL	ng/Kg	
SL-015-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.02	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.65	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.149	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.120	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.818	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.349	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.233	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.405	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.336	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.158	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.83	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.230	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.537	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0413	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.229	1.14	PQL	ng/Kg	
	OCDF	JB	6.95	11.4	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.02	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.455	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.277	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.60	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.75	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.904	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	0.986	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.567	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.264	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.648	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.62	5.64	PQL	ng/Kg	
SL-018-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.35	5.77	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.167	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.137	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.16	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.687	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.296	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.545	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.262	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0676	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.32	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.260	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.614	5.77	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.913	1.15	PQL	ng/Kg	
	OCDF	JB	6.40	11.5	PQL	ng/Kg	
SL-019-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.88	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.251	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.291	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.49	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.22	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.586	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.745	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.361	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.167	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	5.83	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.373	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.09	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0198	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.04	1.17	PQL	ng/Kg	
SL-020-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.67	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.385	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.186	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.83	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.02	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.467	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.646	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.296	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0970	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	5.14	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.310	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.14	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0303	1.15	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.56	5.44	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.258	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.159	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	1.31	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.829	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.234	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.509	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.305	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.139	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.46	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.296	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.564	5.44	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	1.00	1.09	PQL	ng/Kg	
SL-022-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.13	5.74	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.412	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.369	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.72	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.973	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.390	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.775	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.350	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.237	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.59	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.365	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.699	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0389	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.530	1.15	PQL	ng/Kg	
SL-023-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.647	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.916	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.25	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.07	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.723	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.82	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.553	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.531	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.05	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.911	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.815	5.81	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0760	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.797	1.16	PQL	ng/Kg	
SL-036-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.64	5.93	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.174	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.226	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.418	5.93	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.739	5.93	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.212	5.93	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.480	5.93	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.281	5.93	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.179	5.93	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.162	5.93	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.339	5.93	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.475	5.93	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0397	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.316	1.19	PQL	ng/Kg	
	OCDF	JB	5.47	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-047-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.85	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.154	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.151	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.04	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.485	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.167	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.374	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.246	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.101	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.145	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.221	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.552	5.83	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.658	1.17	PQL	ng/Kg	
	OCDF	JB	10.2	11.7	PQL	ng/Kg	
SL-048-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.14	6.29	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.77	6.29	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.127	6.29	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0971	6.29	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.718	6.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.351	6.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.140	6.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.370	6.29	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.230	6.29	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0929	6.29	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.378	6.29	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.209	6.29	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.431	6.29	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.669	1.26	PQL	ng/Kg	
	OCDF	JB	7.83	12.6	PQL	ng/Kg	
SL-050-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.83	5.84	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.113	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.118	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.684	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.391	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.142	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.329	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.135	5.84	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0624	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.727	5.84	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.160	5.84	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.404	5.84	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.499	1.17	PQL	ng/Kg	
	OCDF	JB	6.61	11.7	PQL	ng/Kg	
SL-131-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.503	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.885	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.61	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.92	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.619	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.85	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.609	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.66	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.697	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.27	5.70	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0516	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.442	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-202-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	2.98	5.81	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.307	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0274	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0500	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0390	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.171	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0420	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.300	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0378	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0427	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0243	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0269	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0539	5.81	PQL	ng/Kg	
	OCDF	JB	0.351	11.6	PQL	ng/Kg	
SL-206-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.272	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0725	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0183	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0371	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0258	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0197	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0581	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0388	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0321	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0481	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0197	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0489	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0183	1.15	PQL	ng/Kg	
	OCDD	JB	0.870	11.5	PQL	ng/Kg	
	OCDF	JB	0.165	11.5	PQL	ng/Kg	
SL-207-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.230	5.31	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0278	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0146	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0382	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0384	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0521	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0761	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0435	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0993	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.106	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0257	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0907	5.31	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0332	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0194	1.06	PQL	ng/Kg	
	OCDD	JB	0.624	10.6	PQL	ng/Kg	
	OCDF	JB	0.0867	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX069 **Laboratory: LL**

EDD Filename: DX069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-227-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.552	5.72	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0511	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0311	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0274	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0199	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0212	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0208	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0142	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0216	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0406	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0180	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0408	5.72	PQL	ng/Kg	
	OCDD	JB	3.57	11.4	PQL	ng/Kg	
	OCDF	JB	0.121	11.4	PQL	ng/Kg	
SL-228-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	2.10	5.68	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.452	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0985	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0384	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.268	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.109	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0558	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.106	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0593	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0355	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.121	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0487	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0665	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0219	1.14	PQL	ng/Kg	
	OCDF	JB	2.20	11.4	PQL	ng/Kg	

LDC #: 25907 K

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: QR
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Column ~~Associated Samples~~	Qualifications
		SL-016-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	SP2331	R/A
		SL-019-SA8N-SS-0.0-0.5	↓	↓	↓
		SL-020-SA8N-SS-0.0-0.5			
		SL-022-SA8N-SS-0.0-0.5			

Comments: _____

SAMPLE DELIVERY GROUP

DX070

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Apr-2011	SL-046-SA8N-SS-0.0-0.5	6257901	N	METHOD	1613B	III
13-Apr-2011	SL-204-SA5A-SB-4.0-5.0	6257906	N	METHOD	1613B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5	6257896	N	METHOD	1613B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MS	6257897	MS	METHOD	1613B	III
13-Apr-2011	SL-027-SA8N-SS-0.0-0.5MSD	6257898	MSD	METHOD	1613B	III
13-Apr-2011	DUP02-SA8N-QC-041311	6257895	FD	METHOD	1613B	III
13-Apr-2011	SL-028-SA8N-SS-0.0-0.5	6257899	N	METHOD	1613B	III
13-Apr-2011	SL-205-SA5A-SB-4.0-5.0	6257907	N	METHOD	1613B	III
13-Apr-2011	SL-205-SA5A-SB-8.0-9.0	6257908	N	METHOD	1613B	III
13-Apr-2011	EB02-SA8N-SS-041311	6257902	EB	METHOD	1613B	III
13-Apr-2011	SL-032-SA8N-SS-0.0-0.5	6257900	N	METHOD	1613B	III
13-Apr-2011	SL-061-SA5A-SB-4.0-5.0	6257905	N	METHOD	1613B	III
13-Apr-2011	SL-060-SA5A-SB-4.0-5.0	6257903	N	METHOD	1613B	III
13-Apr-2011	SL-060-SA5A-SB-8.0-9.0	6257904	N	METHOD	1613B	III
18-Apr-2011	SL-085-SA8N-SS-0.0-0.5	6261712	N	METHOD	1613B	III
18-Apr-2011	SL-071-SA8N-SS-0.0-0.5	6261710	N	METHOD	1613B	III
18-Apr-2011	SL-057-SA8N-SS-0.0-0.5	6261709	N	METHOD	1613B	III
18-Apr-2011	SL-080-SA8N-SS-0.0-0.5	6261711	N	METHOD	1613B	III
18-Apr-2011	SL-056-SA8N-SS-0.0-0.5	6261708	N	METHOD	1613B	III
18-Apr-2011	EB05-SA8N-SS-041811	6261715	EB	METHOD	1613B	III
18-Apr-2011	SL-086-SA8N-SS-0.0-0.5	6261713	N	METHOD	1613B	III
18-Apr-2011	SL-132-SA8N-SS-0.0-0.5	6261714	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB02-SA8N-SS-041311 *Collected:* 4/13/2011 12:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.31	JB	0.284	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	2.52	JB	0.182	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	1.17	JBQ	0.184	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.476	JBQ	0.194	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.639	JBQ	0.212	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.418	JBQ	0.200	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.677	JB	0.167	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	1.20	JB	0.154	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.347	JBQ	0.215	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.276	JB	0.113	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.998	JBQ	0.130	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.812	JBQ	0.0987	MDL	10.1	PQL	pg/L	U	B
OCDD	9.89	JBQ	0.437	MDL	20.3	PQL	pg/L	U	B
OCDF	3.58	JB	0.303	MDL	20.3	PQL	pg/L	U	B

Sample ID: EB05-SA8N-SS-041811 *Collected:* 4/18/2011 12:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.93	JB	0.574	MDL	9.88	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	2.04	JB	0.202	MDL	9.88	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.733	JBQ	0.260	MDL	9.88	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.271	JBQ	0.213	MDL	9.88	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.533	JBQ	0.400	MDL	9.88	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.447	JB	0.208	MDL	9.88	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.577	JBQ	0.204	MDL	9.88	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.827	JB	0.208	MDL	9.88	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.948	JBQ	0.183	MDL	9.88	PQL	pg/L	U	B
OCDD	5.51	JBQ	0.654	MDL	19.8	PQL	pg/L	U	B
OCDF	1.33	JB	0.556	MDL	19.8	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP02-SA8N-QC-041311 ***Collected:*** 4/13/2011 10:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	7.56	B	0.0436	MDL	5.74	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	0.637	JB	0.0606	MDL	5.74	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.823	JB	0.0469	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.59	JB	0.0441	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.10	JB	0.0478	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.665	JB	0.0321	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.28	JB	0.0448	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.270	J	0.0342	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.18	JB	0.0562	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.869	J	0.0363	MDL	5.74	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.676	JB	0.0329	MDL	5.74	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.843	JB	0.0387	MDL	5.74	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.358	JQ	0.0363	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	18.7	B	0.0331	MDL	11.5	PQL	ng/Kg	J	FD

Sample ID: SL-027-SA8N-SS-0.0-0.5 ***Collected:*** 4/13/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	24.4	B	0.0614	MDL	5.77	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	1.65	JB	0.0781	MDL	5.77	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HxCDD	0.989	JB	0.0804	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.17	JB	0.0645	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.59	JB	0.0821	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.09	JB	0.0558	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.45	JB	0.0768	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.275	JBQ	0.0518	MDL	5.77	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.27	JB	0.0650	MDL	5.77	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.493	JB	0.0346	MDL	5.77	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.966	JB	0.0430	MDL	5.77	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.993	JB	0.0368	MDL	5.77	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.434	J	0.0261	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	866	B	0.0849	MDL	11.5	PQL	ng/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-027-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	72.7	B	0.0396	MDL	11.5	PQL	ng/Kg	J	FD

Sample ID: **SL-028-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.36	JB	0.0886	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	5.22	JB	0.134	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.62	JB	0.0864	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.95	JB	0.0808	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.34	JB	0.0757	MDL	5.93	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	2.68	JB	0.0672	MDL	5.93	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.59	JB	0.0650	MDL	5.93	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.43	JB	0.0692	MDL	5.93	PQL	ng/Kg	J	Z
OCDD	5190	EB	0.203	MDL	11.9	PQL	ng/Kg	J	*XI

Sample ID: **SL-032-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	3.08	JB	0.0434	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.11	JB	0.0677	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.90	JB	0.0659	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.88	JB	0.0502	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.625	J	0.0373	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.09	JB	0.0771	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.98	J	0.0299	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.35	JB	0.0349	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.16	JB	0.0336	MDL	5.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.448	J	0.0653	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.963	J	0.0855	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: **SL-046-SA8N-SS-0.0-0.5** ***Collected:*** **4/13/2011 8:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.499	JB	0.0364	MDL	5.46	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-046-SA8N-SS-0.0-0.5 *Collected:* 4/13/2011 8:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.458	JB	0.0445	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.623	JBQ	0.0323	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.14	JBQ	0.0468	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.454	JB	0.0262	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.01	JB	0.0436	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.285	J	0.0297	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.342	JBQ	0.0440	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.628	J	0.0329	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.561	JB	0.0283	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.500	JB	0.0362	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0715	JQ	0.0425	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.233	JQ	0.0830	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-056-SA8N-SS-0.0-0.5 *Collected:* 4/18/2011 10:55:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.67	JB	0.0349	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	2.67	JB	0.0135	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.171	JB	0.0215	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.132	JB	0.0310	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.487	JB	0.0282	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.335	JB	0.0322	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.209	JB	0.0253	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.280	JBQ	0.0315	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.218	JB	0.0321	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.154	JBQ	0.0170	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.60	JB	0.0294	MDL	5.79	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.226	JBQ	0.0265	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.383	JB	0.0279	MDL	5.79	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0376	JBQ	0.0118	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.335	JB	0.0491	MDL	1.16	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-057-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.24	JB	0.0238	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.12	JB	0.0125	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0725	JBQ	0.0196	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0198	JBQ	0.0146	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.388	JB	0.0208	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0936	JBQ	0.0153	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.105	JBQ	0.0187	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.124	JBQ	0.0142	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0944	JBQ	0.0219	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0555	JBQ	0.0118	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.18	JB	0.0234	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0925	JB	0.0187	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.195	JBQ	0.0225	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0146	JBQ	0.0104	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.133	JB	0.0451	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	6.38	JB	0.0170	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-060-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 4:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.419	JBQ	0.0306	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0955	JBQ	0.0178	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0771	JBQ	0.0320	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0390	JBQ	0.0185	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0495	JBQ	0.0245	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0465	JB	0.0143	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.130	JBQ	0.0223	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0491	JB	0.0328	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0229	JQ	0.0130	MDL	5.66	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0541	JBQ	0.0148	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0430	JBQ	0.0144	MDL	5.66	PQL	ng/Kg	U	B
OCDD	1.16	JB	0.0327	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.253	JBQ	0.0370	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-060-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 4:11:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.361	JB	0.0301	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.101	JB	0.0107	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0426	JBQ	0.0200	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0234	JBQ	0.0196	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0199	JB	0.0145	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0407	JB	0.0208	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0173	JBQ	0.0114	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0920	JBQ	0.0188	MDL	5.62	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0400	JQ	0.0150	MDL	5.62	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0350	JQ	0.0118	MDL	5.62	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0428	JBQ	0.0127	MDL	5.62	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0528	JBQ	0.0135	MDL	5.62	PQL	ng/Kg	U	B
OCDD	1.21	JB	0.0265	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.186	JB	0.0314	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-061-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 2:28:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.374	JBQ	0.0269	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.140	JB	0.0113	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0407	JBQ	0.0219	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0316	JBQ	0.0219	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0525	JBQ	0.0162	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0528	JBQ	0.0232	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0626	JBQ	0.0130	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0689	JBQ	0.0227	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.128	J	0.0201	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0637	JBQ	0.0293	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0718	JQ	0.0123	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0555	JB	0.0141	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0892	JBQ	0.0141	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0557	JQ	0.0293	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	2.00	JB	0.0263	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.235	JBQ	0.0376	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-071-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 8:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.76	JB	0.0245	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.10	JB	0.0152	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.107	JB	0.0237	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.111	JB	0.0310	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.342	JB	0.0327	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.872	JB	0.0317	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.298	JB	0.0307	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.24	JB	0.0300	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.359	JB	0.0383	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.209	JB	0.0293	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.950	JB	0.0310	MDL	5.84	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.326	JB	0.0309	MDL	5.84	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.813	JB	0.0302	MDL	5.84	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0183	JB	0.0139	MDL	1.17	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.436	JB	0.0653	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	1.93	JB	0.0239	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-080-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.02	JB	0.0460	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	2.29	JB	0.0159	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.134	JBQ	0.0282	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.110	JB	0.0337	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.616	JB	0.0444	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.279	JBQ	0.0348	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.316	JB	0.0388	MDL	6.04	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.256	JB	0.0328	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.171	JBQ	0.0511	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0522	JBQ	0.0221	MDL	6.04	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.67	JB	0.0519	MDL	6.04	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.416	JB	0.0410	MDL	6.04	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.781	JB	0.0506	MDL	6.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.731	JB	0.108	MDL	1.21	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-080-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 10:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	10.0	JB	0.0320	MDL	12.1	PQL	ng/Kg	J	Z

Sample ID: SL-085-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 8:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.831	JB	0.0503	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.494	JB	0.0626	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.95	JB	0.0710	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.92	JB	0.0651	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.20	JB	0.0651	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.06	JB	0.0599	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.658	JB	0.0808	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.258	JB	0.0479	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.955	JB	0.0680	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.74	JB	0.0833	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0450	JBQ	0.0188	MDL	1.14	PQL	ng/Kg	U	B

Sample ID: SL-086-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 12:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.69	JB	0.0420	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.11	JB	0.0176	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0752	JBQ	0.0279	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0296	JBQ	0.0196	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.254	JB	0.0247	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.122	JBQ	0.0207	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.151	JB	0.0226	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.143	JBQ	0.0188	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.108	JB	0.0275	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0413	JBQ	0.0173	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.268	JB	0.0153	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.155	JB	0.0231	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.226	JB	0.0147	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0774	JB	0.0276	MDL	1.15	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-086-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 12:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	4.43	JB	0.0285	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-132-SA8N-SS-0.0-0.5 ***Collected:*** 4/18/2011 2:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.43	JB	0.0235	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.268	JB	0.0359	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.249	JBQ	0.0476	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.634	JB	0.0392	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.916	JB	0.0497	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.300	JB	0.0364	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.700	JB	0.0464	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.379	JB	0.0432	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.147	JB	0.0245	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.65	JB	0.0461	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.238	JB	0.0340	MDL	5.39	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.505	JB	0.0417	MDL	5.39	PQL	ng/Kg	J	Z
OCDF	10.6	JjB	0.0249	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-204-SA5A-SB-4.0-5.0 ***Collected:*** 4/13/2011 9:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.369	JBQ	0.0277	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.105	JBQ	0.0114	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0835	JB	0.0198	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0393	JBQ	0.0244	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0510	JBQ	0.0186	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0651	JBQ	0.0255	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0323	JBQ	0.0139	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0713	JB	0.0240	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0656	JQ	0.0181	MDL	5.60	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0396	JBQ	0.0140	MDL	5.60	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0997	JBQ	0.0145	MDL	5.60	PQL	ng/Kg	U	B
OCDD	0.962	JB	0.0356	MDL	11.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-204-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.122	JBQ	0.0410	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-205-SA5A-SB-4.0-5.0** ***Collected:*** **4/13/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.830	JB	0.0239	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JBQ	0.00686	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0538	JBQ	0.0143	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0429	JBQ	0.0126	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0195	JBQ	0.00973	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0590	JBQ	0.0186	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0420	J	0.0157	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0137	JQ	0.00995	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0459	JBQ	0.0110	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0590	JBQ	0.0114	MDL	5.63	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0251	JQ	0.0198	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	5.19	JB	0.0219	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.311	JBQ	0.0340	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-205-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 11:22:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.300	JB	0.0196	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0864	JB	0.00641	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0623	JBQ	0.0123	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0252	JBQ	0.0164	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0334	JBQ	0.0136	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0156	JBQ	0.00916	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0411	JB	0.0166	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0654	JQ	0.0125	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0188	JQ	0.00916	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0359	JBQ	0.00871	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0540	JBQ	0.0105	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0182	JQ	0.0175	MDL	1.13	PQL	ng/Kg	J	Z
OCDD	0.724	JB	0.0168	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-205-SA5A-SB-8.0-9.0** ***Collected:*** **4/13/2011 11:22:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
OCDF	0.196	JBQ	0.0307	MDL	11.3	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*XI	Compound Quantitation and CRQL
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX070

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B370125	4/24/2011 1:25:00 AM	1,2,3,4,6,7,8-HPCDD	7.94 pg/L	EB02-SA8N-SS-041311
		1,2,3,4,6,7,8-HPCDF	4.55 pg/L	
		1,2,3,4,7,8,9-HPCDF	2.38 pg/L	
		1,2,3,4,7,8-HxCDD	1.28 pg/L	
		1,2,3,4,7,8-HXCDF	1.50 pg/L	
		1,2,3,6,7,8-HXCDD	1.08 pg/L	
		1,2,3,6,7,8-HXCDF	1.21 pg/L	
		1,2,3,7,8,9-HXCDD	1.65 pg/L	
		1,2,3,7,8,9-HXCDF	1.98 pg/L	
		1,2,3,7,8-PECDD	0.899 pg/L	
		1,2,3,7,8-PECDF	0.844 pg/L	
		2,3,4,6,7,8-HXCDF	1.71 pg/L	
		2,3,4,7,8-PECDF	1.28 pg/L	
		2,3,7,8-TCDD	0.264 pg/L	
		2,3,7,8-TCDF	0.147 pg/L	
		OCDD	47.4 pg/L	
		OCDF	6.44 pg/L	
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD	4.37 pg/L	EB05-SA8N-SS-041811
		1,2,3,4,6,7,8-HPCDF	1.81 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.983 pg/L	
		1,2,3,4,7,8-HxCDD	0.811 pg/L	
		1,2,3,4,7,8-HXCDF	0.812 pg/L	
		1,2,3,6,7,8-HXCDD	0.674 pg/L	
		1,2,3,6,7,8-HXCDF	0.817 pg/L	
		1,2,3,7,8,9-HXCDD	1.07 pg/L	
		1,2,3,7,8,9-HXCDF	0.969 pg/L	
		1,2,3,7,8-PECDD	0.428 pg/L	
		1,2,3,7,8-PECDF	0.992 pg/L	
		2,3,4,6,7,8-HXCDF	0.470 pg/L	
		2,3,4,7,8-PECDF	0.699 pg/L	
		2,3,7,8-TCDD	0.371 pg/L	
		OCDD	7.09 pg/L	
		OCDF	2.65 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB02-SA8N-SS-041311(RES)	1,2,3,4,6,7,8-HPCDD	4.31 pg/L	4.31U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,6,7,8-HPCDF	2.52 pg/L	2.52U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,7,8,9-HPCDF	1.17 pg/L	1.17U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,7,8-HxCDD	0.476 pg/L	0.476U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,4,7,8-HXCDF	0.639 pg/L	0.639U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,6,7,8-HXCDD	0.418 pg/L	0.418U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,6,7,8-HXCDF	0.677 pg/L	0.677U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,7,8,9-HXCDF	1.20 pg/L	1.20U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,7,8-PECDD	0.347 pg/L	0.347U pg/L
EB02-SA8N-SS-041311(RES)	1,2,3,7,8-PECDF	0.276 pg/L	0.276U pg/L
EB02-SA8N-SS-041311(RES)	2,3,4,6,7,8-HXCDF	0.998 pg/L	0.998U pg/L
EB02-SA8N-SS-041311(RES)	2,3,4,7,8-PECDF	0.812 pg/L	0.812U pg/L
EB02-SA8N-SS-041311(RES)	OCDD	9.89 pg/L	9.89U pg/L
EB02-SA8N-SS-041311(RES)	OCDF	3.58 pg/L	3.58U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,6,7,8-HPCDD	2.93 pg/L	2.93U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,6,7,8-HPCDF	2.04 pg/L	2.04U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,7,8,9-HPCDF	0.733 pg/L	0.733U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,4,7,8-HXCDF	0.271 pg/L	0.271U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA8N-SS-041811(RES)	1,2,3,6,7,8-HXCDD	0.533 pg/L	0.533U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,6,7,8-HXCDF	0.447 pg/L	0.447U pg/L
EB05-SA8N-SS-041811(RES)	1,2,3,7,8-PECDF	0.577 pg/L	0.577U pg/L
EB05-SA8N-SS-041811(RES)	2,3,4,6,7,8-HXCDF	0.827 pg/L	0.827U pg/L
EB05-SA8N-SS-041811(RES)	2,3,4,7,8-PECDF	0.948 pg/L	0.948U pg/L
EB05-SA8N-SS-041811(RES)	OCDD	5.51 pg/L	5.51U pg/L
EB05-SA8N-SS-041811(RES)	OCDF	1.33 pg/L	1.33U pg/L

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1050B370750	4/19/2011 7:50:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8-PECDD 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	0.298 ng/Kg 0.145 ng/Kg 0.0559 ng/Kg 0.0436 ng/Kg 0.0670 ng/Kg 0.0275 ng/Kg 0.0529 ng/Kg 0.0327 ng/Kg 0.0471 ng/Kg 0.0595 ng/Kg 0.0602 ng/Kg 0.622 ng/Kg 0.267 ng/Kg	DUP02-SA8N-QC-041311 SL-032-SA8N-SS-0.0-0.5 SL-046-SA8N-SS-0.0-0.5 SL-060-SA5A-SB-4.0-5.0 SL-060-SA5A-SB-8.0-9.0 SL-061-SA5A-SB-4.0-5.0 SL-204-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-4.0-5.0 SL-205-SA5A-SB-8.0-9.0
BLK1150B371141	4/28/2011 11:41:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD 2,3,7,8-TCDF OCDD OCDF	0.231 ng/Kg 0.126 ng/Kg 0.0849 ng/Kg 0.0421 ng/Kg 0.0469 ng/Kg 0.0348 ng/Kg 0.0401 ng/Kg 0.0543 ng/Kg 0.0854 ng/Kg 0.0571 ng/Kg 0.0538 ng/Kg 0.0651 ng/Kg 0.0593 ng/Kg 0.0462 ng/Kg 0.0227 ng/Kg 0.458 ng/Kg 0.215 ng/Kg	SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5
BLK1150B371402	5/9/2011 2:02:00 PM	2,3,7,8-TCDF	0.0223 ng/Kg	SL-056-SA8N-SS-0.0-0.5 SL-057-SA8N-SS-0.0-0.5 SL-071-SA8N-SS-0.0-0.5 SL-080-SA8N-SS-0.0-0.5 SL-085-SA8N-SS-0.0-0.5 SL-086-SA8N-SS-0.0-0.5 SL-132-SA8N-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1180B370615	5/3/2011 6:15:00 AM	1,2,3,4,6,7,8-HPCDD	0.221 ng/Kg	SL-027-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.104 ng/Kg	SL-028-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0661 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0208 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0521 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0353 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0335 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0254 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0904 ng/Kg	
		1,2,3,7,8-PECDD	0.0182 ng/Kg	
		1,2,3,7,8-PECDF	0.0263 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0685 ng/Kg	
		2,3,4,7,8-PECDF	0.0537 ng/Kg	
		OCDD	0.477 ng/Kg	
		OCDF	0.210 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-027-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.275 ng/Kg	0.275U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.171 ng/Kg	0.171U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.132 ng/Kg	0.132U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.218 ng/Kg	0.218U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.154 ng/Kg	0.154U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.226 ng/Kg	0.226U ng/Kg
SL-056-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0376 ng/Kg	0.0376U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0198 ng/Kg	0.0198U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.0936 ng/Kg	0.0936U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0944 ng/Kg	0.0944U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0555 ng/Kg	0.0555U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0925 ng/Kg	0.0925U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.195 ng/Kg	0.195U ng/Kg
SL-057-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.419 ng/Kg	0.419U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0955 ng/Kg	0.0955U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0771 ng/Kg	0.0771U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0390 ng/Kg	0.0390U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0495 ng/Kg	0.0495U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0465 ng/Kg	0.0465U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.130 ng/Kg	0.130U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0491 ng/Kg	0.0491U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0541 ng/Kg	0.0541U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	OCDD	1.16 ng/Kg	1.16U ng/Kg
SL-060-SA5A-SB-4.0-5.0(RES)	OCDF	0.253 ng/Kg	0.253U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.361 ng/Kg	0.361U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.101 ng/Kg	0.101U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0426 ng/Kg	0.0426U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0234 ng/Kg	0.0234U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0199 ng/Kg	0.0199U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0407 ng/Kg	0.0407U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0173 ng/Kg	0.0173U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0920 ng/Kg	0.0920U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0428 ng/Kg	0.0428U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0528 ng/Kg	0.0528U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	OCDD	1.21 ng/Kg	1.21U ng/Kg
SL-060-SA5A-SB-8.0-9.0(RES)	OCDF	0.186 ng/Kg	0.186U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.374 ng/Kg	0.374U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0407 ng/Kg	0.0407U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0316 ng/Kg	0.0316U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0528 ng/Kg	0.0528U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0626 ng/Kg	0.0626U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0689 ng/Kg	0.0689U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0637 ng/Kg	0.0637U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0555 ng/Kg	0.0555U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0892 ng/Kg	0.0892U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	OCDD	2.00 ng/Kg	2.00U ng/Kg
SL-061-SA5A-SB-4.0-5.0(RES)	OCDF	0.235 ng/Kg	0.235U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.107 ng/Kg	0.107U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.111 ng/Kg	0.111U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.359 ng/Kg	0.359U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.209 ng/Kg	0.209U ng/Kg
SL-071-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0183 ng/Kg	0.0183U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.134 ng/Kg	0.134U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.110 ng/Kg	0.110U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.256 ng/Kg	0.256U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-080-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0522 ng/Kg	0.0522U ng/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.258 ng/Kg	0.258U ng/Kg
SL-085-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0450 ng/Kg	0.0450U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0752 ng/Kg	0.0752U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0296 ng/Kg	0.0296U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.122 ng/Kg	0.122U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.143 ng/Kg	0.143U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.268 ng/Kg	0.268U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.226 ng/Kg	0.226U ng/Kg
SL-086-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0774 ng/Kg	0.0774U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.268 ng/Kg	0.268U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.379 ng/Kg	0.379U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.147 ng/Kg	0.147U ng/Kg
SL-132-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.238 ng/Kg	0.238U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.369 ng/Kg	0.369U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0835 ng/Kg	0.0835U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0393 ng/Kg	0.0393U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0510 ng/Kg	0.0510U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0651 ng/Kg	0.0651U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0323 ng/Kg	0.0323U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0713 ng/Kg	0.0713U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0396 ng/Kg	0.0396U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0997 ng/Kg	0.0997U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	OCDD	0.962 ng/Kg	0.962U ng/Kg
SL-204-SA5A-SB-4.0-5.0(RES)	OCDF	0.122 ng/Kg	0.122U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.830 ng/Kg	0.830U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0538 ng/Kg	0.0538U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0195 ng/Kg	0.0195U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0590 ng/Kg	0.0590U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0459 ng/Kg	0.0459U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0590 ng/Kg	0.0590U ng/Kg
SL-205-SA5A-SB-4.0-5.0(RES)	OCDF	0.311 ng/Kg	0.311U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.300 ng/Kg	0.300U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0864 ng/Kg	0.0864U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0623 ng/Kg	0.0623U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0252 ng/Kg	0.0252U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0334 ng/Kg	0.0334U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0156 ng/Kg	0.0156U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0411 ng/Kg	0.0411U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0359 ng/Kg	0.0359U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-205-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0540 ng/Kg	0.0540U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	OCDD	0.724 ng/Kg	0.724U ng/Kg
SL-205-SA5A-SB-8.0-9.0(RES)	OCDF	0.196 ng/Kg	0.196U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

***Method:* 1613B**
***Matrix:* SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-027-SA8N-SS-0.0-0.5MSD (SL-027-SA8N-SS-0.0-0.5)	OCDD	-	-3	40.00-135.00	-	OCDD	J (all detects) R (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA8N-SS-041311	1,2,3,4,6,7,8-HPCDD	JB	4.31	10.1	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	2.52	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	1.17	10.1	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.476	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.639	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.418	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.677	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	1.20	10.1	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.347	10.1	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.276	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.998	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.812	10.1	PQL	pg/L	
	OCDD	JBQ	9.89	20.3	PQL	pg/L	
	OCDF	JB	3.58	20.3	PQL	pg/L	
EB05-SA8N-SS-041811	1,2,3,4,6,7,8-HPCDD	JB	2.93	9.88	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	2.04	9.88	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.733	9.88	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.271	9.88	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.533	9.88	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.447	9.88	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.577	9.88	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.827	9.88	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.948	9.88	PQL	pg/L	
	OCDD	JBQ	5.51	19.8	PQL	pg/L	
	OCDF	JB	1.33	19.8	PQL	pg/L	

Method: 1613B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SA8N-QC-041311	2,3,7,8-TCDF		1.23	1.15	PQL	ng/Kg	
SL-027-SA8N-SS-0.0-0.5	2,3,7,8-TCDF		1.30	1.15	PQL	ng/Kg	
SL-028-SA8N-SS-0.0-0.5	2,3,7,8-TCDF		2.18	1.19	PQL	ng/Kg	
SL-085-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.71	1.14	PQL	ng/Kg	
SL-132-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.47	1.08	PQL	ng/Kg	
DUP02-SA8N-QC-041311	1,2,3,4,7,8,9-HPCDF	JB	0.637	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.823	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.59	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.10	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.665	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.28	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.270	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	1.18	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.869	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.676	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.843	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.358	1.15	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.65	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.989	5.77	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.17	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.59	5.77	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.09	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.45	5.77	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.275	5.77	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	1.27	5.77	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.493	5.77	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.966	5.77	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.993	5.77	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.434	1.15	PQL	ng/Kg	
SL-028-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.36	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	5.22	5.93	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.62	5.93	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.95	5.93	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.34	5.93	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	2.68	5.93	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.59	5.93	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.43	5.93	PQL	ng/Kg	
SL-032-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.08	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.11	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.90	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.88	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.625	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.09	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	J	1.98	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.35	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.16	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.448	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.963	1.08	PQL	ng/Kg	
SL-046-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.499	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.458	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.623	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	1.14	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.454	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.01	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.285	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.342	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	J	0.628	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.561	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.500	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0715	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.233	1.09	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-056-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.67	5.79	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	2.67	5.79	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.171	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.132	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.487	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.335	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.209	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.280	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.218	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.154	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.60	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.226	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.383	5.79	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0376	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.335	1.16	PQL	ng/Kg	
SL-057-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.24	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.12	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0725	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0198	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.388	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0936	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.105	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.124	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0944	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0555	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.18	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0925	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.195	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0146	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.133	1.11	PQL	ng/Kg	
	OCDF	JB	6.38	11.1	PQL	ng/Kg	
SL-060-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.419	5.66	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0955	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0771	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0390	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0495	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0465	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.130	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0491	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0229	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0541	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0430	5.66	PQL	ng/Kg	
	OCDD	JB	1.16	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.253	11.3	PQL	ng/Kg	
SL-060-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.361	5.62	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.101	5.62	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0426	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0234	5.62	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0199	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0407	5.62	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0173	5.62	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0920	5.62	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JQ	0.0400	5.62	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0350	5.62	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0428	5.62	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0528	5.62	PQL	ng/Kg	
	OCDD	JB	1.21	11.2	PQL	ng/Kg	
	OCDF	JB	0.186	11.2	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-061-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.374	5.69	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.140	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0407	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0316	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0525	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0528	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0626	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0689	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.128	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0637	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0718	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0555	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0892	5.69	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0557	1.14	PQL	ng/Kg	
	OCDD	JB	2.00	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.235	11.4	PQL	ng/Kg	
SL-071-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.76	5.84	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.10	5.84	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.107	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.111	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.342	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.872	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.298	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.24	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.359	5.84	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.209	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.950	5.84	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.326	5.84	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.813	5.84	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0183	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.436	1.17	PQL	ng/Kg	
	OCDF	JB	1.93	11.7	PQL	ng/Kg	
SL-080-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.02	6.04	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	2.29	6.04	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.134	6.04	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.110	6.04	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.616	6.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.279	6.04	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.316	6.04	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.256	6.04	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.171	6.04	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0522	6.04	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.67	6.04	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.416	6.04	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.781	6.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.731	1.21	PQL	ng/Kg	
	OCDF	JB	10.0	12.1	PQL	ng/Kg	
SL-085-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.831	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.494	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.95	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.92	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.20	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.06	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.658	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.258	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.955	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.74	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0450	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-086-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.69	5.76	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.11	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0752	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0296	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.254	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.122	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.151	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.143	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.108	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0413	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.268	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.155	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.226	5.76	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0774	1.15	PQL	ng/Kg	
	OCDF	JB	4.43	11.5	PQL	ng/Kg	
SL-132-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.43	5.39	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.268	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.249	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.634	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.916	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.300	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.700	5.39	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.379	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.147	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.65	5.39	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.238	5.39	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.505	5.39	PQL	ng/Kg	
	OCDF	JB	10.6	10.8	PQL	ng/Kg	
SL-204-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.369	5.60	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.105	5.60	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0835	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0393	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0510	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0651	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0323	5.60	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	0.0713	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0656	5.60	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0396	5.60	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0997	5.60	PQL	ng/Kg	
	OCDD	JB	0.962	11.2	PQL	ng/Kg	
	OCDF	JBQ	0.122	11.2	PQL	ng/Kg	
SL-205-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.830	5.63	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.185	5.63	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0538	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0429	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0195	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0590	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0420	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JQ	0.0137	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0459	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0590	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0251	1.13	PQL	ng/Kg	
	OCDD	JB	5.19	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.311	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: DX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-205-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.300	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.0864	5.67	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0623	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0252	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0334	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0156	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0411	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0654	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JQ	0.0188	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0359	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0540	5.67	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0182	1.13	PQL	ng/Kg	
	OCDD	JB	0.724	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.196	11.3	PQL	ng/Kg	

Field Duplicate RPD Report

Lab Reporting Batch ID: DX070 **Laboratory: LL**

EDD Filename: PrepDX070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
MOISTURE	15.2	14.9	2		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-027-SA8N-SS-0.0-0.5	DUP02-SA8N-QC-041311			
1,2,3,4,6,7,8-HPCDD	104	67.7	42	50.00	
1,2,3,4,7,8-HxCDD	0.989	0.823	18	50.00	
1,2,3,4,7,8-HXCDF	2.17	1.59	31	50.00	
1,2,3,6,7,8-HXCDD	4.59	3.10	39	50.00	
1,2,3,6,7,8-HXCDF	1.09	0.665	48	50.00	
1,2,3,7,8,9-HXCDD	2.45	2.28	7	50.00	
1,2,3,7,8,9-HXCDF	0.275	0.270	2	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	1.27	1.18	7	50.00	
2,3,4,6,7,8-HXCDF	0.966	0.676	35	50.00	
2,3,4,7,8-PECDF	0.993	0.843	16	50.00	
2,3,7,8-TCDD	0.434	0.358	19	50.00	
2,3,7,8-TCDF	1.43	1.24	14	50.00	
OCDD	866	523	49	50.00	
1,2,3,4,6,7,8-HPCDF	24.4	7.56	105	50.00	
1,2,3,4,7,8,9-HPCDF	1.65	0.637	89	50.00	J(all detects)
1,2,3,7,8-PECDF	0.493	0.869	55	50.00	
OCDF	72.7	18.7	118	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

LDC #: 25907L

VALIDATION FINDINGS WORKSHEET

Compound Quantitation and Reported CRQLs

Reviewer: OR

2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were the correct internal standard (IS), quantitation ions and relative response factors (RRF) used to quantitate the compound?

Y N N/A Compound quantitation and CRQLs were adjusted to reflect all sample dilutions and dry weight factors (if necessary).

#	Date	Sample ID	Finding	~~Associated Samples~~	Qualifications
		SL-028-SPSW-SS-0.005	OCDD > Cal Range		J/P

LDC #: 25907L

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: QC
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

(Y) N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	~~Associated Samples~~ column	Qualifications
		DUP02-SA8N-QC-041311	2,3,7,8-TCDF	SP2331	R/A
		SL-027-SA8N-SS-0.0-0.5			
		SL-028-SA8N-SS-0.0-0.5			
		SL-085-SA8N-SS-0.0-0.5			
		SL-132-SA8N-SS-0.0-0.5			

Comments: _____

SAMPLE DELIVERY GROUP

DX071

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-130-SA8N-SS-0.0-0.5	6259079	N	METHOD	1613B	III
14-Apr-2011	SL-040-SA8N-SS-0.0-0.5	6259072	N	METHOD	1613B	III
14-Apr-2011	SL-078-SA8N-SS-0.0-0.5	6259073	N	METHOD	1613B	III
14-Apr-2011	SL-134-SA8N-SS-0.0-0.5	6259083	N	METHOD	1613B	III
14-Apr-2011	SL-091-SA8N-SS-0.0-0.5	6259078	N	METHOD	1613B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5	6259080	N	METHOD	1613B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MS	6259081	MS	METHOD	1613B	III
14-Apr-2011	SL-133-SA8N-SS-0.0-0.5MSD	6259082	MSD	METHOD	1613B	III
14-Apr-2011	SL-082-SA8N-SS-0.0-0.5	6259075	N	METHOD	1613B	III
14-Apr-2011	SL-089-SA8N-SS-0.0-0.5	6259076	N	METHOD	1613B	III
14-Apr-2011	SL-079-SA8N-SS-0.0-0.5	6259074	N	METHOD	1613B	III
14-Apr-2011	SL-090-SA8N-SS-0.0-0.5	6259077	N	METHOD	1613B	III
18-Apr-2011	SL-032-SA5A-SB-3.0-4.0	6261716	N	METHOD	1613B	III
18-Apr-2011	SL-254-SA5A-SB-2.5-3.5	6261719	N	METHOD	1613B	III
18-Apr-2011	EB13-SA5A-SB-041811	6261720	EB	METHOD	1613B	III
18-Apr-2011	SL-174-SA5A-SB-2.0-3.0	6261718	N	METHOD	1613B	III
18-Apr-2011	SL-172-SA5A-SB-4.0-5.0	6261717	N	METHOD	1613B	III
19-Apr-2011	SL-075-SA8N-SS-0.0-0.5	6262845	N	METHOD	1613B	III
19-Apr-2011	SL-077-SA8N-SS-0.0-0.5	6262847	N	METHOD	1613B	III
19-Apr-2011	SL-092-SA8N-SS-0.0-0.5	6262848	N	METHOD	1613B	III
19-Apr-2011	SL-093-SA8N-SS-0.0-0.5	6262849	N	METHOD	1613B	III
19-Apr-2011	SL-076-SA8N-SS-0.0-0.5	6262846	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: AQ**

Sample ID: EB13-SA5A-SB-041811 **Collected:** 4/18/2011 1:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.73	JB	0.365	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	0.790	JBQ	0.162	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.349	JBQ	0.215	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.294	JBQ	0.275	MDL	9.91	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.204	JBQ	0.124	MDL	9.91	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.360	JBQ	0.289	MDL	9.91	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.380	JB	0.119	MDL	9.91	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.666	JB	0.134	MDL	9.91	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.195	JBQ	0.137	MDL	9.91	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.410	JBQ	0.115	MDL	9.91	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.364	JB	0.129	MDL	9.91	PQL	pg/L	U	B
2,3,7,8-TCDF	0.269	J	0.198	MDL	1.98	PQL	pg/L	J	Z
OCDD	3.83	JB	0.448	MDL	19.8	PQL	pg/L	U	B
OCDF	1.12	JBQ	0.449	MDL	19.8	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-032-SA5A-SB-3.0-4.0 **Collected:** 4/18/2011 9:14:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.26	JB	0.0351	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.273	JB	0.0114	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0586	JBQ	0.0191	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.115	JB	0.0191	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.128	JBQ	0.0141	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.174	JB	0.0194	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0936	JB	0.0126	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.162	JB	0.0183	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0966	JBQ	0.0167	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.157	JB	0.0177	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.179	JB	0.00939	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0959	JBQ	0.0130	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.153	JB	0.00869	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-032-SA5A-SB-3.0-4.0 *Collected:* 4/18/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0247	JBQ	0.0168	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0554	JBQ	0.0148	MDL	1.15	PQL	ng/Kg	U	B
OCDF	0.630	JB	0.0277	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-040-SA8N-SS-0.0-0.5 *Collected:* 4/14/2011 10:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.67	JB	0.0495	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.264	JB	0.0521	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.183	JB	0.0746	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.119	JBQ	0.0718	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.03	JB	0.0731	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.279	JB	0.0580	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.769	JB	0.0686	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.442	JB	0.0512	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.157	JB	0.0325	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.374	JB	0.0358	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.379	JB	0.0474	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.624	JB	0.0338	MDL	5.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0349	JQ	0.0227	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.109	JQ	0.0635	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	7.48	JB	0.0562	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-075-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.06	JB	0.0403	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.648	JB	0.0135	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0787	JBQ	0.0302	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0504	JB	0.0198	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.336	JB	0.0233	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.117	JBQ	0.0204	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0763	JB	0.0193	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.128	JB	0.0196	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.130	JBQ	0.0272	MDL	5.81	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-075-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 8:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0405	JBQ	0.0184	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.31	JB	0.0300	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0862	JB	0.0224	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.273	JB	0.0326	MDL	5.81	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0840	JBQ	0.0771	MDL	1.16	PQL	ng/Kg	U	B
OCDF	2.31	JB	0.0391	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: SL-076-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 2:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.898	JB	0.0225	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.140	JBQ	0.0453	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.172	JB	0.0460	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.75	JB	0.0515	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.458	JB	0.0470	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.191	JB	0.0424	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.722	JB	0.0435	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.441	JB	0.0559	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0896	JBQ	0.0343	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.936	JB	0.0560	MDL	5.58	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.146	JB	0.0425	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	1.06	JB	0.0547	MDL	5.58	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.15	B	0.152	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: SL-077-SA8N-SS-0.0-0.5 *Collected:* 4/19/2011 10:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.38	JB	0.0718	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.13	JB	0.0942	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.35	JB	0.0879	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.90	JB	0.0963	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.781	JB	0.0672	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.87	JB	0.0920	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.553	JB	0.0707	MDL	6.33	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-077-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 10:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.537	JB	0.0479	MDL	6.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.290	JB	0.0569	MDL	6.33	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.920	JB	0.0565	MDL	6.33	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.12	JB	0.0568	MDL	6.33	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0544	JBQ	0.0189	MDL	1.27	PQL	ng/Kg	U	B

Sample ID: SL-078-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 11:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.14	JB	0.0454	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.345	JB	0.0197	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.376	JB	0.0249	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.106	JB	0.0214	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0915	JB	0.0205	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.124	JB	0.0206	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0857	JB	0.0243	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0403	JBQ	0.0255	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.746	JB	0.0334	MDL	5.75	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0607	JBQ	0.0198	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.211	JB	0.0328	MDL	5.75	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.130	JQ	0.0809	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	10.6	JB	0.0542	MDL	11.5	PQL	ng/Kg	J	Z
OCDF	0.681	JBQ	0.0513	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-079-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.29	JB	0.0289	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.324	JB	0.0318	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.401	JB	0.0839	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.901	JB	0.0724	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.48	JB	0.0821	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.509	JB	0.0559	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.44	JB	0.0755	MDL	6.03	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-079-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.785	JB	0.0481	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.350	JBQ	0.0386	MDL	6.03	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.610	JBQ	0.0358	MDL	6.03	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.535	JB	0.0450	MDL	6.03	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.15	JB	0.0368	MDL	6.03	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0453	J	0.0196	MDL	1.21	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.733	JQ	0.0874	MDL	1.21	PQL	ng/Kg	J	Z
OCDF	6.41	JB	0.0398	MDL	12.1	PQL	ng/Kg	J	Z

Sample ID: **SL-082-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 3:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.31	JB	0.0287	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.380	JBQ	0.0345	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.303	JB	0.0769	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.63	JB	0.113	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.65	JB	0.0778	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.931	JB	0.0839	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.01	JB	0.0724	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.927	JB	0.0787	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.341	JB	0.0532	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.571	JB	0.0673	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.83	JB	0.0972	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0262	JQ	0.0233	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	4.86	JB	0.0360	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: **SL-089-SA8N-SS-0.0-0.5** ***Collected:*** **4/14/2011 4:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.15	JB	0.0427	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.653	JB	0.0233	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0753	JBQ	0.0293	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0596	JB	0.0391	MDL	5.83	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0678	JBQ	0.0358	MDL	5.83	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-089-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.810	JB	0.0392	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.160	JBQ	0.0262	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.13	JB	0.0360	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.01	JB	0.0258	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.127	JB	0.0248	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.250	JB	0.0184	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.154	JB	0.0219	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.219	JB	0.0184	MDL	5.83	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0753	JQ	0.0281	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	1.18	JB	0.0352	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-090-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 4:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.43	JB	0.0370	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.132	JB	0.0269	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.144	JBQ	0.0457	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.146	JB	0.0534	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.28	JB	0.0400	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.259	JB	0.0372	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.52	JB	0.0346	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.798	JB	0.0233	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.217	JBQ	0.0251	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.247	JBQ	0.0160	MDL	5.91	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.208	JB	0.0200	MDL	5.91	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.395	JB	0.0167	MDL	5.91	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0196	J	0.0134	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.172	JQ	0.0338	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	3.33	JB	0.0219	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-091-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 2:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.97	JB	0.0438	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.191	JBQ	0.0305	MDL	5.94	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-091-SA8N-SS-0.0-0.5 **Collected:** 4/14/2011 2:50:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.186	JBQ	0.0749	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.88	JB	0.118	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.898	JB	0.0662	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.313	JB	0.0823	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.977	JB	0.0511	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.462	JB	0.0470	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.166	JBQ	0.0271	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.59	JB	0.0465	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.370	JB	0.0408	MDL	5.94	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.18	JB	0.0532	MDL	5.94	PQL	ng/Kg	J	Z
OCDF	3.22	JB	0.0415	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: SL-092-SA8N-SS-0.0-0.5 **Collected:** 4/19/2011 1:35:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.82	JB	0.0382	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.734	JB	0.0184	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0930	JB	0.0372	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0858	JB	0.0415	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.483	JB	0.0372	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.519	JB	0.0434	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.171	JBQ	0.0323	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.715	JBQ	0.0414	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.295	JB	0.0436	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.138	JBQ	0.0251	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.462	JB	0.0357	MDL	5.57	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.242	JB	0.0345	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.709	JB	0.0356	MDL	5.57	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.457	JB	0.0813	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	1.25	JBQ	0.0427	MDL	11.1	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-093-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 1:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.39	JB	0.0345	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.42	JB	0.0166	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.159	JBQ	0.0334	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.158	JB	0.0505	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.32	JB	0.0561	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.859	JB	0.0520	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.464	JB	0.0470	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.898	JB	0.0494	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.307	JB	0.0647	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.274	JB	0.0462	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	2.64	JB	0.0603	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.431	JB	0.0514	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.79	JB	0.0593	MDL	5.65	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0429	JBQ	0.0208	MDL	1.13	PQL	ng/Kg	U	B
OCDF	2.52	JB	0.0355	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: SL-130-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 9:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.92	JB	0.0383	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.811	JB	0.0775	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.41	JB	0.0907	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.32	JB	0.0761	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.782	JB	0.0709	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.55	JB	0.0682	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.21	JB	0.0535	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.388	JB	0.0392	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.95	JB	0.0577	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.08	JB	0.0489	MDL	5.85	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.02	JB	0.0539	MDL	5.85	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0931	JQ	0.0168	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.05	J	0.167	MDL	1.17	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-133-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 3:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.04	JB	0.0550	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.857	JB	0.0882	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	4.98	JB	0.0937	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.13	JB	0.0912	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.36	J	0.0883	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.64	JB	0.0869	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.17	JB	0.0993	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.699	JB	0.111	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	3.96	JB	0.198	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.40	JB	0.0872	MDL	5.83	PQL	ng/Kg	J	Z
OCDD	493	B	0.0722	MDL	11.7	PQL	ng/Kg	J	Q, Q

Sample ID: SL-134-SA8N-SS-0.0-0.5 ***Collected:*** 4/14/2011 2:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	5.58	JB	0.0482	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.632	JB	0.0498	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.425	JB	0.0797	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.88	JB	0.117	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.70	JB	0.0776	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.608	JB	0.0854	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.89	JB	0.0694	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.04	JB	0.0661	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.343	JBQ	0.0412	MDL	5.61	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.00	JB	0.0485	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.564	JB	0.0579	MDL	5.61	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.800	JB	0.0465	MDL	5.61	PQL	ng/Kg	J	Z
OCDF	10.1	JB	0.0463	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-172-SA5A-SB-4.0-5.0 ***Collected:*** 4/18/2011 3:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.442	JBQ	0.0224	MDL	6.00	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-172-SA5A-SB-4.0-5.0 ***Collected:*** 4/18/2011 3:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.194	JB	0.00998	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.188	JB	0.0191	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.139	JB	0.0195	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.247	JB	0.0175	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.209	JB	0.0202	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.206	JBQ	0.0151	MDL	6.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.207	JB	0.0195	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.254	JB	0.0202	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.243	JBQ	0.0160	MDL	6.00	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.245	JB	0.00793	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.193	JB	0.0169	MDL	6.00	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.289	JB	0.00853	MDL	6.00	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0920	JBQ	0.0166	MDL	1.20	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0648	JBQ	0.0120	MDL	1.20	PQL	ng/Kg	U	B
OCDD	1.37	JB	0.0260	MDL	12.0	PQL	ng/Kg	U	B
OCDF	0.280	JB	0.0237	MDL	12.0	PQL	ng/Kg	U	B

Sample ID: SL-174-SA5A-SB-2.0-3.0 ***Collected:*** 4/18/2011 3:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.206	JB	0.0158	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0984	JBQ	0.00501	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0695	JBQ	0.0105	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0202	JBQ	0.0131	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0393	JBQ	0.00934	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0701	JB	0.0135	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0602	JB	0.00779	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0863	JB	0.0132	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0851	JB	0.0109	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0432	JBQ	0.0126	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0405	JBQ	0.00634	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0459	JBQ	0.00879	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0699	JB	0.00701	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0179	JBQ	0.0148	MDL	1.10	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-174-SA5A-SB-2.0-3.0** ***Collected:*** **4/18/2011 3:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	0.0245	JBQ	0.0116	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.459	JB	0.0196	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.148	JBQ	0.0240	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: **SL-254-SA5A-SB-2.5-3.5** ***Collected:*** **4/18/2011 12:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.298	JBQ	0.0195	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0799	JBQ	0.00624	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0615	JBQ	0.0139	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0344	JB	0.00914	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0294	JB	0.0134	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0179	JB	0.00758	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0584	JBQ	0.0126	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0546	JB	0.0111	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0241	JB	0.00814	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0276	JBQ	0.00825	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0414	JBQ	0.00825	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0237	JBQ	0.0176	MDL	1.11	PQL	ng/Kg	U	B
OCDD	2.03	JB	0.0278	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.157	JBQ	0.0254	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX071

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD	4.37 pg/L	EB13-SA5A-SB-041811
		1,2,3,4,6,7,8-HPCDF	1.81 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.983 pg/L	
		1,2,3,4,7,8-HxCDD	0.811 pg/L	
		1,2,3,4,7,8-HXCDF	0.812 pg/L	
		1,2,3,6,7,8-HXCDD	0.674 pg/L	
		1,2,3,6,7,8-HXCDF	0.817 pg/L	
		1,2,3,7,8,9-HXCDD	1.07 pg/L	
		1,2,3,7,8,9-HXCDF	0.969 pg/L	
		1,2,3,7,8-PECDD	0.428 pg/L	
		1,2,3,7,8-PECDF	0.992 pg/L	
		2,3,4,6,7,8-HXCDF	0.470 pg/L	
		2,3,4,7,8-PECDF	0.699 pg/L	
		2,3,7,8-TCDD	0.371 pg/L	
		OCDD	7.09 pg/L	
		OCDF	2.65 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB13-SA5A-SB-041811(RES)	1,2,3,4,6,7,8-HPCDD	2.73 pg/L	2.73U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,6,7,8-HPCDF	0.790 pg/L	0.790U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,7,8,9-HPCDF	0.349 pg/L	0.349U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,7,8-HxCDD	0.294 pg/L	0.294U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,4,7,8-HXCDF	0.204 pg/L	0.204U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,6,7,8-HXCDD	0.360 pg/L	0.360U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,6,7,8-HXCDF	0.380 pg/L	0.380U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,7,8,9-HXCDF	0.666 pg/L	0.666U pg/L
EB13-SA5A-SB-041811(RES)	1,2,3,7,8-PECDF	0.195 pg/L	0.195U pg/L
EB13-SA5A-SB-041811(RES)	2,3,4,6,7,8-HXCDF	0.410 pg/L	0.410U pg/L
EB13-SA5A-SB-041811(RES)	2,3,4,7,8-PECDF	0.364 pg/L	0.364U pg/L
EB13-SA5A-SB-041811(RES)	OCDD	3.83 pg/L	3.83U pg/L
EB13-SA5A-SB-041811(RES)	OCDF	1.12 pg/L	1.12U pg/L

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B370308	4/29/2011 3:08:00 AM	2,3,7,8-TCDF	0.0304 ng/Kg	SL-040-SA8N-SS-0.0-0.5
				SL-078-SA8N-SS-0.0-0.5
				SL-079-SA8N-SS-0.0-0.5
				SL-082-SA8N-SS-0.0-0.5
				SL-089-SA8N-SS-0.0-0.5
				SL-090-SA8N-SS-0.0-0.5
				SL-091-SA8N-SS-0.0-0.5
				SL-130-SA8N-SS-0.0-0.5
				SL-134-SA8N-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B371740	4/22/2011 5:40:00 PM	1,2,3,4,6,7,8-HPCDD	0.251 ng/Kg	SL-040-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0712 ng/Kg	SL-078-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0462 ng/Kg	SL-079-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0149 ng/Kg	SL-082-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0294 ng/Kg	SL-089-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0308 ng/Kg	SL-090-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0156 ng/Kg	SL-091-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0253 ng/Kg	SL-130-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0308 ng/Kg	SL-134-SA8N-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0250 ng/Kg	
		1,2,3,7,8-PECDF	0.0222 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0256 ng/Kg	
		2,3,4,7,8-PECDF	0.0491 ng/Kg	
		OCDD	0.502 ng/Kg	
		OCDF	0.149 ng/Kg	
BLK1150B371141	4/28/2011 11:41:00 AM	1,2,3,4,6,7,8-HPCDD	0.231 ng/Kg	SL-032-SA5A-SB-3.0-4.0
		1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	SL-075-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0849 ng/Kg	SL-076-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	SL-077-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0469 ng/Kg	SL-092-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0348 ng/Kg	SL-093-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0401 ng/Kg	SL-172-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0543 ng/Kg	SL-174-SA5A-SB-2.0-3.0
		1,2,3,7,8,9-HXCDF	0.0854 ng/Kg	SL-254-SA5A-SB-2.5-3.5
		1,2,3,7,8-PECDD	0.0571 ng/Kg	
		1,2,3,7,8-PECDF	0.0538 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0593 ng/Kg	
		2,3,7,8-TCDD	0.0462 ng/Kg	
		2,3,7,8-TCDF	0.0227 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK1150B371402	5/9/2011 2:02:00 PM	2,3,7,8-TCDF	0.0223 ng/Kg	SL-032-SA5A-SB-3.0-4.0 SL-075-SA8N-SS-0.0-0.5 SL-076-SA8N-SS-0.0-0.5 SL-077-SA8N-SS-0.0-0.5 SL-092-SA8N-SS-0.0-0.5 SL-093-SA8N-SS-0.0-0.5 SL-172-SA5A-SB-4.0-5.0 SL-174-SA5A-SB-2.0-3.0 SL-254-SA5A-SB-2.5-3.5
BLK1220B370536	5/10/2011 5:36:00 AM	2,3,7,8-TCDF	0.0340 ng/Kg	SL-133-SA8N-SS-0.0-0.5
BLK1220B371838	5/4/2011 6:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.160 ng/Kg	SL-133-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.0552 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0327 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0176 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0299 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0563 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0395 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0587 ng/Kg	
		1,2,3,7,8-PECDD	0.0291 ng/Kg	
		1,2,3,7,8-PECDF	0.0402 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0330 ng/Kg	
		2,3,4,7,8-PECDF	0.0477 ng/Kg	
		2,3,7,8-TCDF	0.0138 ng/Kg	
		OCDD	0.283 ng/Kg	
		OCDF	0.0855 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.273 ng/Kg	0.273U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0586 ng/Kg	0.0586U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.115 ng/Kg	0.115U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.174 ng/Kg	0.174U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0936 ng/Kg	0.0936U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.162 ng/Kg	0.162U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.0966 ng/Kg	0.0966U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.157 ng/Kg	0.157U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.179 ng/Kg	0.179U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0959 ng/Kg	0.0959U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.153 ng/Kg	0.153U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0247 ng/Kg	0.0247U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0554 ng/Kg	0.0554U ng/Kg
SL-032-SA5A-SB-3.0-4.0(RES)	OCDF	0.630 ng/Kg	0.630U ng/Kg
SL-040-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0787 ng/Kg	0.0787U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0504 ng/Kg	0.0504U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.117 ng/Kg	0.117U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0763 ng/Kg	0.0763U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.128 ng/Kg	0.128U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.130 ng/Kg	0.130U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0405 ng/Kg	0.0405U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0862 ng/Kg	0.0862U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.273 ng/Kg	0.273U ng/Kg
SL-075-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0840 ng/Kg	0.0840U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.172 ng/Kg	0.172U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.191 ng/Kg	0.191U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0896 ng/Kg	0.0896U ng/Kg
SL-076-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-077-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0544 ng/Kg	0.0544U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	1.14 ng/Kg	1.14U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.345 ng/Kg	0.345U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.106 ng/Kg	0.106U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.124 ng/Kg	0.124U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0857 ng/Kg	0.0857U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-078-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0403 ng/Kg	0.0403U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0607 ng/Kg	0.0607U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.211 ng/Kg	0.211U ng/Kg
SL-078-SA8N-SS-0.0-0.5(RES)	OCDF	0.681 ng/Kg	0.681U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0753 ng/Kg	0.0753U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0596 ng/Kg	0.0596U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0678 ng/Kg	0.0678U ng/Kg
SL-089-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.219 ng/Kg	0.219U ng/Kg
SL-090-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.132 ng/Kg	0.132U ng/Kg
SL-090-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-091-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.191 ng/Kg	0.191U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0930 ng/Kg	0.0930U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0858 ng/Kg	0.0858U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.295 ng/Kg	0.295U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.138 ng/Kg	0.138U ng/Kg
SL-092-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.242 ng/Kg	0.242U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.159 ng/Kg	0.159U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.158 ng/Kg	0.158U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.307 ng/Kg	0.307U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.274 ng/Kg	0.274U ng/Kg
SL-093-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0429 ng/Kg	0.0429U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.442 ng/Kg	0.442U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.194 ng/Kg	0.194U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.188 ng/Kg	0.188U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.139 ng/Kg	0.139U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.207 ng/Kg	0.207U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.254 ng/Kg	0.254U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.243 ng/Kg	0.243U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.245 ng/Kg	0.245U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.193 ng/Kg	0.193U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.289 ng/Kg	0.289U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0920 ng/Kg	0.0920U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0648 ng/Kg	0.0648U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	OCDD	1.37 ng/Kg	1.37U ng/Kg
SL-172-SA5A-SB-4.0-5.0(RES)	OCDF	0.280 ng/Kg	0.280U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.206 ng/Kg	0.206U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: PrepDX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0984 ng/Kg	0.0984U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0695 ng/Kg	0.0695U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0202 ng/Kg	0.0202U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0393 ng/Kg	0.0393U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.0701 ng/Kg	0.0701U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDF	0.0602 ng/Kg	0.0602U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.0863 ng/Kg	0.0863U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.0851 ng/Kg	0.0851U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0432 ng/Kg	0.0432U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0405 ng/Kg	0.0405U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0459 ng/Kg	0.0459U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.0699 ng/Kg	0.0699U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.0179 ng/Kg	0.0179U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDF	0.0245 ng/Kg	0.0245U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	OCDD	0.459 ng/Kg	0.459U ng/Kg
SL-174-SA5A-SB-2.0-3.0(RES)	OCDF	0.148 ng/Kg	0.148U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.298 ng/Kg	0.298U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.0799 ng/Kg	0.0799U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0615 ng/Kg	0.0615U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0344 ng/Kg	0.0344U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0294 ng/Kg	0.0294U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0179 ng/Kg	0.0179U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0584 ng/Kg	0.0584U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0241 ng/Kg	0.0241U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0276 ng/Kg	0.0276U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0414 ng/Kg	0.0414U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDD	0.0237 ng/Kg	0.0237U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	OCDD	2.03 ng/Kg	2.03U ng/Kg
SL-254-SA5A-SB-2.5-3.5(RES)	OCDF	0.157 ng/Kg	0.157U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-133-SA8N-SS-0.0-0.5MSD (SL-133-SA8N-SS-0.0-0.5)	OCDD	-	314	40.00-135.00	44 (20.00)	OCDD	J (all detects)

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB13-SA5A-SB-041811	1,2,3,4,6,7,8-HPCDD	JB	2.73	9.91	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.790	9.91	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.349	9.91	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.294	9.91	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.204	9.91	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.360	9.91	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.380	9.91	PQL	pg/L	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.666	9.91	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.195	9.91	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.410	9.91	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.364	9.91	PQL	pg/L	
	2,3,7,8-TCDF	J	0.269	1.98	PQL	pg/L	
	OCDD	JB	3.83	19.8	PQL	pg/L	
	OCDF	JBQ	1.12	19.8	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	16.4	1.10	PQL	ng/Kg	
SL-091-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	3.88	1.19	PQL	ng/Kg	
SL-133-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	5.78	1.17	PQL	ng/Kg	
SL-032-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	2.26	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.273	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0586	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.115	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.128	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.174	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0936	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.162	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0966	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.157	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.179	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0959	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.153	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0247	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0554	1.15	PQL	ng/Kg	
	OCDF	JB	0.630	11.5	PQL	ng/Kg	
SL-040-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.67	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.264	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.183	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.119	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.03	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.279	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.769	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.442	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.157	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.374	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.379	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.624	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0349	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.109	1.08	PQL	ng/Kg	
	OCDF	JB	7.48	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.06	5.81	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.648	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0787	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0504	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.336	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.117	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0763	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.128	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.130	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0405	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.31	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0862	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.273	5.81	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0840	1.16	PQL	ng/Kg	
	OCDF	JB	2.31	11.6	PQL	ng/Kg	
SL-076-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.898	5.58	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.140	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.172	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.75	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.458	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.191	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.722	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.441	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0896	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.936	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.146	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.06	5.58	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.691	1.12	PQL	ng/Kg	
	OCDF	JB	1.60	11.2	PQL	ng/Kg	
SL-077-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.38	6.33	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.13	6.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.35	6.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.90	6.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.781	6.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.87	6.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.553	6.33	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.537	6.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.290	6.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.920	6.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.12	6.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0544	1.27	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.754	1.27	PQL	ng/Kg	
SL-078-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.14	5.75	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.345	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.376	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.106	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0915	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.124	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0857	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0403	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.746	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0607	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.211	5.75	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.130	1.15	PQL	ng/Kg	
	OCDD	JB	10.6	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.681	11.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-079-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.29	6.03	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.324	6.03	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.401	6.03	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.901	6.03	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.48	6.03	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.509	6.03	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.44	6.03	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.785	6.03	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.350	6.03	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.610	6.03	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.535	6.03	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.15	6.03	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0453	1.21	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.733	1.21	PQL	ng/Kg	
	OCDF	JB	6.41	12.1	PQL	ng/Kg	
SL-082-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.31	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.380	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.303	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.63	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.65	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.931	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.01	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.927	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.341	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.571	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.83	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0262	1.10	PQL	ng/Kg	
	OCDF	JB	4.86	11.0	PQL	ng/Kg	
SL-089-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.15	5.83	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.653	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0753	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0596	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0678	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.810	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.160	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.13	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	1.01	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.127	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.250	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.154	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.219	5.83	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0753	1.17	PQL	ng/Kg	
	OCDF	JB	1.18	11.7	PQL	ng/Kg	
SL-090-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.43	5.91	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.132	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.144	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.146	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.28	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.259	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.52	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.798	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.217	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.247	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.208	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.395	5.91	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0196	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.172	1.18	PQL	ng/Kg	
	OCDF	JB	3.33	11.8	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.97	5.94	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.191	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.186	5.94	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.88	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.898	5.94	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.313	5.94	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.977	5.94	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.462	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.166	5.94	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.59	5.94	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.370	5.94	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.18	5.94	PQL	ng/Kg	
	OCDF	JB	3.22	11.9	PQL	ng/Kg	
SL-092-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.82	5.57	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.734	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0930	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0858	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.483	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.519	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.171	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.715	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.295	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.138	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.462	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.242	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.709	5.57	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.457	1.11	PQL	ng/Kg	
	OCDF	JBQ	1.25	11.1	PQL	ng/Kg	
SL-093-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.39	5.65	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.42	5.65	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.159	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.158	5.65	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.32	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.859	5.65	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.464	5.65	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.898	5.65	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.307	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.274	5.65	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	2.64	5.65	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.431	5.65	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.79	5.65	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0429	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.698	1.13	PQL	ng/Kg	
	OCDF	JB	2.52	11.3	PQL	ng/Kg	
SL-130-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.92	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.811	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.41	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.32	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.782	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.55	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.21	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.388	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.95	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.08	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.02	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0931	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	J	1.05	1.17	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.04	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.857	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	4.98	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.13	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	1.36	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	1.64	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.17	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.699	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	3.96	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.40	5.83	PQL	ng/Kg	
SL-134-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.58	5.61	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.632	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.425	5.61	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.88	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.70	5.61	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.608	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.89	5.61	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.04	5.61	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.343	5.61	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.00	5.61	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.564	5.61	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.800	5.61	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.875	1.12	PQL	ng/Kg	
	OCDF	JB	10.1	11.2	PQL	ng/Kg	
SL-172-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.442	6.00	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.194	6.00	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.188	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.139	6.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.247	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.209	6.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.206	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.207	6.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.254	6.00	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.243	6.00	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.245	6.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.193	6.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.289	6.00	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0920	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0648	1.20	PQL	ng/Kg	
	OCDD	JB	1.37	12.0	PQL	ng/Kg	
	OCDF	JB	0.280	12.0	PQL	ng/Kg	
SL-174-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.206	5.50	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0984	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0695	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0202	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0393	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0701	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0602	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0863	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0851	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0432	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0405	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0459	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0699	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0179	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0245	1.10	PQL	ng/Kg	
	OCDD	JB	0.459	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.148	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX071 **Laboratory: LL**

EDD Filename: DX071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-254-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.298	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0799	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0615	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0344	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0294	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0179	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0584	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0546	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0241	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0276	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0414	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0237	1.11	PQL	ng/Kg	
	OCDD	JB	2.03	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.157	11.1	PQL	ng/Kg	

LDC #: 25907M

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: CR
2nd Reviewer: CR

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

Y N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	~~Associated Samples~~ Column	Qualifications
		SL-076-SA8N-SS0.0-0.5	2,3,7,8-TCDF	SP2331	B/A
		SL-077-SA8NSS0.0-0.5			
		SL-082-SA8N-SS0.0-0.5			
		SL-091-SA8N-SS0.0-0.5			
		SL-093-SA8N-SS00-0.5			
		SL-133-SA8N-SS0.0-0.5			
		SL-134-SA8N-SS0.0-0.5			

Comments: _____

SAMPLE DELIVERY GROUP

DX072

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0	6259105	N	METHOD	1613B	IV
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MS	6259106	MS	METHOD	1613B	IV
14-Apr-2011	SL-058-SA5A-SB-3.0-4.0MSD	6259107	MSD	METHOD	1613B	IV
14-Apr-2011	DUP14-SA5A-QC-041411	6259104	FD	METHOD	1613B	IV
14-Apr-2011	SL-059-SA5A-SB-3.0-4.0	6259108	N	METHOD	1613B	IV
14-Apr-2011	SL-065-SA5A-SB-4.0-5.0	6259109	N	METHOD	1613B	IV
14-Apr-2011	SL-242-SA5A-SB-2.5-3.5	6259110	N	METHOD	1613B	IV
15-Apr-2011	SL-141-SA8N-SS-0.0-0.5	6260141	N	METHOD	1613B	IV
15-Apr-2011	SL-062-SA8N-SS-0.0-0.5	6260139	N	METHOD	1613B	IV
15-Apr-2011	SL-052-SA5A-SB-4.0-5.0	6260144	N	METHOD	1613B	IV
15-Apr-2011	SL-067-SA8N-SS-0.0-0.5	6260140	N	METHOD	1613B	IV
15-Apr-2011	SL-243-SA5A-SB-4.0-5.0	6260145	N	METHOD	1613B	IV
15-Apr-2011	SL-044-SA5A-SB-3.0-4.0	6260143	N	METHOD	1613B	IV
15-Apr-2011	SL-041-SA5A-SB-4.0-5.0	6260142	N	METHOD	1613B	IV
19-Apr-2011	SL-135-SA8N-SS-0.0-0.5	6262855	N	METHOD	1613B	IV
19-Apr-2011	SL-122-SA8N-SS-0.0-0.5	6262854	N	METHOD	1613B	IV
19-Apr-2011	SL-095-SA8N-SS-0.0-0.5	6262851	N	METHOD	1613B	IV
19-Apr-2011	SL-094-SA8N-SS-0.0-0.5	6262850	N	METHOD	1613B	IV
19-Apr-2011	SL-096-SA8N-SS-0.0-0.5	6262852	N	METHOD	1613B	IV
19-Apr-2011	SL-097-SA8N-SS-0.0-0.5	6262853	N	METHOD	1613B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: DUP14-SA5A-QC-041411 *Collected:* 4/14/2011 10:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.326	JBQ	0.0382	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.365	JB	0.0200	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.278	JB	0.0425	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.197	JB	0.0335	MDL	5.46	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.221	JB	0.0341	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.256	JBQ	0.0359	MDL	5.46	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.193	JB	0.0271	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.218	JB	0.0350	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.267	JB	0.0371	MDL	5.46	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.270	J	0.0480	MDL	5.46	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.317	JBQ	0.0155	MDL	5.46	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.212	JB	0.0263	MDL	5.46	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.309	JB	0.0195	MDL	5.46	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0705	JB	0.0317	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.240	JBQ	0.0337	MDL	1.09	PQL	ng/Kg	J	Z, FD
OCDD	0.851	JB	0.0356	MDL	10.9	PQL	ng/Kg	UJ	B, FD
OCDF	0.569	JB	0.0621	MDL	10.9	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.215	JB	0.0169	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0612	JB	0.00643	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0429	JBQ	0.00958	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0147	JBQ	0.0115	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0158	JBQ	0.00947	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0223	JBQ	0.0114	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0217	JB	0.00688	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0525	JBQ	0.0101	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0736	JB	0.00744	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0196	JBQ	0.0131	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0184	JBQ	0.00643	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0441	JBQ	0.00564	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0436	JBQ	0.00609	MDL	5.56	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-041-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 3:38:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.675	JB	0.0233	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.127	JBQ	0.0195	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-044-SA5A-SB-3.0-4.0 *Collected:* 4/15/2011 12:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.539	JBQ	0.0232	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.142	JBQ	0.00755	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0955	JB	0.0117	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0352	JB	0.0134	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0494	JB	0.00932	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0531	JB	0.0137	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0374	JBQ	0.00744	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0697	JB	0.0127	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.119	JB	0.00888	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0404	JBQ	0.0133	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0280	JB	0.00644	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0621	JB	0.00733	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0796	JB	0.00633	MDL	5.53	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0124	JBQ	0.00943	MDL	1.11	PQL	ng/Kg	U	B
OCDD	4.24	JB	0.0307	MDL	11.1	PQL	ng/Kg	J	Z
OCDF	0.302	JBQ	0.0226	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.267	JB	0.0158	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0599	JBQ	0.00610	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0368	JBQ	0.00932	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0117	JBQ	0.0105	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0148	JBQ	0.00898	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0217	JB	0.0106	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0109	JBQ	0.00633	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0302	JB	0.00978	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0130	JBQ	0.00541	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-052-SA5A-SB-4.0-5.0 *Collected:* 4/15/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0366	JB	0.00621	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0494	JB	0.00575	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0180	JBQ	0.00944	MDL	1.15	PQL	ng/Kg	U	B
OCDD	0.654	JB	0.0231	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.122	JB	0.0183	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-058-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 10:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.726	JB	0.0355	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,6,7,8-HPCDF	0.142	JBQ	0.0149	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0704	JBQ	0.0207	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0422	JB	0.0171	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0426	JB	0.0102	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.146	JB	0.0178	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.0569	JB	0.00967	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.257	JBQ	0.0168	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.157	JB	0.0107	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0805	JBQ	0.0152	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0758	JBQ	0.00736	MDL	5.43	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0542	JBQ	0.00956	MDL	5.43	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0681	JBQ	0.00736	MDL	5.43	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0326	JBQ	0.0138	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0124	U	0.0124	MDL	1.09	PQL	ng/Kg	UJ	FD
OCDD	12.1	B	0.0265	MDL	10.9	PQL	ng/Kg	J	FD
OCDF	0.236	JBQ	0.0252	MDL	10.9	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-059-SA5A-SB-3.0-4.0 *Collected:* 4/14/2011 11:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.383	JBQ	0.0184	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.137	JB	0.00755	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.164	JBQ	0.0127	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0476	JBQ	0.0153	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0586	JBQ	0.0147	MDL	5.59	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-059-SA5A-SB-3.0-4.0** ***Collected:*** **4/14/2011 11:06:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.125	JBQ	0.0158	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0647	JB	0.0113	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.298	JB	0.0148	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.277	JB	0.0151	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.148	JBQ	0.0142	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.126	JB	0.00722	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.161	JBQ	0.0115	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.145	JB	0.00755	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0309	JB	0.0135	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0304	JB	0.0126	MDL	1.12	PQL	ng/Kg	U	B
OCDD	0.827	JB	0.0257	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.346	JB	0.0244	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: **SL-062-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 9:05:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.56	JB	0.0421	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.60	JB	0.0207	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0542	JBQ	0.0269	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0468	JBQ	0.0195	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.445	JB	0.0338	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.108	JB	0.0192	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0803	JBQ	0.0225	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.141	JB	0.0170	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.117	JB	0.0211	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0401	JBQ	0.0165	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.331	JB	0.0225	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.133	JBQ	0.0167	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.188	JB	0.0261	MDL	5.67	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.120	JBQ	0.0644	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	6.87	JB	0.0378	MDL	11.3	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-065-SA5A-SB-4.0-5.0** ***Collected:*** **4/14/2011 12:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.320	JB	0.0176	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.126	JB	0.00736	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0726	JBQ	0.0136	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0214	JBQ	0.0130	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0211	JBQ	0.0111	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0432	JBQ	0.0135	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0303	JBQ	0.00892	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0653	JB	0.0127	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0650	JBQ	0.0120	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0232	JBQ	0.0151	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0354	JB	0.00691	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0752	JBQ	0.00948	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0749	JB	0.00747	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0167	JBQ	0.0143	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.952	JB	0.0265	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.217	JBQ	0.0244	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: **SL-067-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 10:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.73	JB	0.0384	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	2.01	JB	0.0209	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.140	JBQ	0.0338	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0647	JB	0.0228	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.584	JB	0.0357	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.253	JB	0.0235	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.138	JBQ	0.0250	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.170	JB	0.0220	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.125	JB	0.0310	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0557	JB	0.0185	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.621	JB	0.0332	MDL	5.98	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.162	JB	0.0245	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.282	JB	0.0330	MDL	5.98	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.198	JB	0.0909	MDL	1.20	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-067-SA8N-SS-0.0-0.5 ***Collected:*** 4/15/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	9.02	JB	0.0262	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: SL-094-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.63	JB	0.0283	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.484	JB	0.0125	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0852	JB	0.0256	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.0275	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.296	JB	0.0201	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.344	JB	0.0277	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.150	JB	0.0166	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.467	JB	0.0272	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.575	JB	0.0219	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.184	JB	0.0179	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.276	JB	0.0125	MDL	5.35	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.139	JBQ	0.0169	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.268	JB	0.0128	MDL	5.35	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0256	JB	0.0119	MDL	1.07	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.125	JB	0.0213	MDL	1.07	PQL	ng/Kg	J	Z
OCDF	1.02	JB	0.0310	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-095-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.68	JB	0.0325	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.458	JB	0.0130	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0642	JBQ	0.0310	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0722	JBQ	0.0300	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.240	JB	0.0213	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.295	JB	0.0313	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0967	JB	0.0175	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.388	JB	0.0303	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.339	JBQ	0.0255	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0993	JBQ	0.0183	MDL	5.63	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-095-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.170	JBQ	0.0128	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.121	JB	0.0181	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.222	JB	0.0128	MDL	5.63	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0146	JBQ	0.0128	MDL	1.13	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.103	JBQ	0.0215	MDL	1.13	PQL	ng/Kg	U	B
OCDF	0.955	JB	0.0337	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-096-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.87	JB	0.0408	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.547	JB	0.0162	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.104	JB	0.0353	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0704	JBQ	0.0306	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.337	JBQ	0.0251	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.335	JB	0.0316	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0833	JBQ	0.0205	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.428	JB	0.0302	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.459	JB	0.0286	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.172	JB	0.0150	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.113	JB	0.0221	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.281	JB	0.0159	MDL	5.32	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.106	JB	0.0287	MDL	1.06	PQL	ng/Kg	U	B
OCDF	1.21	JB	0.0431	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-097-SA8N-SS-0.0-0.5 ***Collected:*** 4/19/2011 3:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.09	JB	0.0396	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.620	JB	0.0183	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0972	JB	0.0311	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0670	JBQ	0.0352	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.333	JB	0.0292	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.481	JB	0.0359	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.104	JBQ	0.0255	MDL	5.72	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-097-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.714	JB	0.0345	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.804	JB	0.0307	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0953	JB	0.0247	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.213	JB	0.0181	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.114	JB	0.0228	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.206	JB	0.0185	MDL	5.72	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.136	JBQ	0.0261	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	1.42	JB	0.0407	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: **SL-122-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.88	JB	0.0316	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.760	JB	0.0153	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.191	JB	0.0289	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.132	JB	0.0266	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.315	JB	0.0252	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.236	JB	0.0273	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.179	JB	0.0224	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.353	JBQ	0.0262	MDL	5.19	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.246	JB	0.0304	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.176	JBQ	0.0416	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.323	JB	0.0181	MDL	5.19	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.248	JBQ	0.0248	MDL	5.19	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.483	JB	0.0222	MDL	5.19	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0549	JBQ	0.0223	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.363	JB	0.0433	MDL	1.04	PQL	ng/Kg	J	Z
OCDF	1.14	JB	0.0338	MDL	10.4	PQL	ng/Kg	U	B

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.08	JB	0.00941	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.133	JBQ	0.0176	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.168	JB	0.0231	MDL	5.42	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-135-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:15:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.251	JB	0.0177	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.561	JB	0.0239	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.151	JB	0.0154	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.543	JB	0.0212	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.251	JB	0.0198	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.199	JB	0.0312	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.753	JB	0.0144	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.140	JBQ	0.0164	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.351	JB	0.0165	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.113	JB	0.0364	MDL	1.08	PQL	ng/Kg	U	B
OCDF	2.80	JB	0.0247	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: **SL-141-SA8N-SS-0.0-0.5** ***Collected:*** **4/15/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.01	JB	0.0386	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.51	JB	0.0180	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0749	JB	0.0279	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0676	JBQ	0.0323	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.485	JB	0.0302	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.141	JB	0.0325	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0877	JB	0.0205	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.197	JB	0.0288	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.118	JBQ	0.0224	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0451	JBQ	0.0192	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.758	JB	0.0261	MDL	5.68	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.121	JBQ	0.0167	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.205	JBQ	0.0288	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.144	JBQ	0.0740	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	6.09	JB	0.0360	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: **SL-242-SA5A-SB-2.5-3.5** ***Collected:*** **4/14/2011 3:54:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.726	JB	0.0251	MDL	5.66	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-242-SA5A-SB-2.5-3.5** ***Collected:*** **4/14/2011 3:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.232	JB	0.0140	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0702	JBQ	0.0156	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0259	JBQ	0.0148	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0546	JBQ	0.0207	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0489	JB	0.0133	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0538	JB	0.0135	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0838	JB	0.0119	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0581	JB	0.0109	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0273	JBQ	0.0140	MDL	5.66	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0269	JB	0.00566	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0600	JBQ	0.00855	MDL	5.66	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0501	JB	0.00624	MDL	5.66	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0138	JBQ	0.0124	MDL	1.13	PQL	ng/Kg	U	B
OCDD	6.93	JB	0.0330	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.728	JB	0.0341	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: **SL-243-SA5A-SB-4.0-5.0** ***Collected:*** **4/15/2011 10:46:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.266	JBQ	0.0174	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0883	JB	0.00630	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0223	JBQ	0.00882	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0140	JBQ	0.00974	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0209	JB	0.0110	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.00788	JBQ	0.00664	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0197	JB	0.0105	MDL	5.70	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0450	JB	0.00710	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0307	JBQ	0.00596	MDL	5.70	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0559	JB	0.00607	MDL	5.70	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0189	JB	0.00974	MDL	1.14	PQL	ng/Kg	U	B
OCDD	1.19	JB	0.0278	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.206	JB	0.0188	MDL	11.4	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX072

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1080B371256	4/23/2011 12:56:00 PM	1,2,3,4,6,7,8-HPCDD	0.194 ng/Kg	SL-041-SA5A-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.0892 ng/Kg	SL-044-SA5A-SB-3.0-4.0
		1,2,3,4,7,8,9-HPCDF	0.0492 ng/Kg	SL-052-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0288 ng/Kg	SL-059-SA5A-SB-3.0-4.0
		1,2,3,4,7,8-HXCDF	0.0844 ng/Kg	SL-062-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0367 ng/Kg	SL-065-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0439 ng/Kg	SL-067-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0531 ng/Kg	SL-141-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0731 ng/Kg	SL-242-SA5A-SB-2.5-3.5
		1,2,3,7,8-PECDD	0.0354 ng/Kg	SL-243-SA5A-SB-4.0-5.0
		1,2,3,7,8-PECDF	0.0353 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0328 ng/Kg	
		2,3,4,7,8-PECDF	0.0901 ng/Kg	
		2,3,7,8-TCDD	0.0284 ng/Kg	
		2,3,7,8-TCDF	0.0112 ng/Kg	
		OCDD	0.428 ng/Kg	
		OCDF	0.158 ng/Kg	
BLK1150B371141	4/28/2011 11:41:00 AM	1,2,3,4,6,7,8-HPCDD	0.231 ng/Kg	SL-094-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	SL-095-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0849 ng/Kg	SL-096-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	SL-097-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0469 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0348 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0401 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0543 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0854 ng/Kg	
		1,2,3,7,8-PECDD	0.0571 ng/Kg	
		1,2,3,7,8-PECDF	0.0538 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0651 ng/Kg	
		2,3,4,7,8-PECDF	0.0593 ng/Kg	
		2,3,7,8-TCDD	0.0462 ng/Kg	
		2,3,7,8-TCDF	0.0227 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK1160B370229	4/28/2011 2:29:00 AM	1,2,3,4,6,7,8-HPCDD	0.211 ng/Kg	SL-122-SA8N-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.221 ng/Kg	SL-135-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0916 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0389 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0838 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0462 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0727 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0481 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0641 ng/Kg	
		1,2,3,7,8-PECDD	0.0569 ng/Kg	
		1,2,3,7,8-PECDF	0.0631 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0953 ng/Kg	
		2,3,4,7,8-PECDF	0.117 ng/Kg	
		2,3,7,8-TCDD	0.0319 ng/Kg	
		2,3,7,8-TCDF	0.0540 ng/Kg	
		OCDD	0.517 ng/Kg	
		OCDF	0.277 ng/Kg	

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1160B371604	4/28/2011 4:04:00 PM	1,2,3,4,6,7,8-HPCDD	0.247 ng/Kg	DUP14-SA5A-QC-041411
		1,2,3,4,6,7,8-HPCDF	0.149 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0979 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0285 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0658 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0370 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0601 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0614 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0973 ng/Kg	
		1,2,3,7,8-PECDF	0.0555 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.104 ng/Kg	
		2,3,4,7,8-PECDF	0.0640 ng/Kg	
		2,3,7,8-TCDD	0.0262 ng/Kg	
		2,3,7,8-TCDF	0.0380 ng/Kg	
		OCDD	0.449 ng/Kg	
		OCDF	0.273 ng/Kg	
BLK1220B370705	5/5/2011 7:05:00 AM	1,2,3,4,6,7,8-HPCDD	0.173 ng/Kg	SL-058-SA5A-SB-3.0-4.0
		1,2,3,4,6,7,8-HPCDF	0.0881 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0487 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0242 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0612 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0426 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0458 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0398 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0821 ng/Kg	
		1,2,3,7,8-PECDD	0.0512 ng/Kg	
		1,2,3,7,8-PECDF	0.0563 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0520 ng/Kg	
		2,3,4,7,8-PECDF	0.0781 ng/Kg	
		2,3,7,8-TCDD	0.0183 ng/Kg	
		OCDD	0.359 ng/Kg	
		OCDF	0.148 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP14-SA5A-QC-041411(RES)	1,2,3,4,6,7,8-HPCDD	0.326 ng/Kg	0.326U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,4,6,7,8-HPCDF	0.365 ng/Kg	0.365U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,4,7,8,9-HPCDF	0.278 ng/Kg	0.278U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,4,7,8-HXCDF	0.221 ng/Kg	0.221U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,6,7,8-HXCDF	0.193 ng/Kg	0.193U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,7,8,9-HXCDD	0.218 ng/Kg	0.218U ng/Kg
DUP14-SA5A-QC-041411(RES)	1,2,3,7,8,9-HXCDF	0.267 ng/Kg	0.267U ng/Kg
DUP14-SA5A-QC-041411(RES)	2,3,4,6,7,8-HXCDF	0.212 ng/Kg	0.212U ng/Kg
DUP14-SA5A-QC-041411(RES)	2,3,4,7,8-PECDF	0.309 ng/Kg	0.309U ng/Kg
DUP14-SA5A-QC-041411(RES)	2,3,7,8-TCDD	0.0705 ng/Kg	0.0705U ng/Kg
DUP14-SA5A-QC-041411(RES)	OCDD	0.851 ng/Kg	0.851U ng/Kg
DUP14-SA5A-QC-041411(RES)	OCDF	0.569 ng/Kg	0.569U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.215 ng/Kg	0.215U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0612 ng/Kg	0.0612U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0429 ng/Kg	0.0429U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0147 ng/Kg	0.0147U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0158 ng/Kg	0.0158U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0223 ng/Kg	0.0223U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0217 ng/Kg	0.0217U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0525 ng/Kg	0.0525U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0736 ng/Kg	0.0736U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0196 ng/Kg	0.0196U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0184 ng/Kg	0.0184U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0441 ng/Kg	0.0441U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0436 ng/Kg	0.0436U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	OCDD	0.675 ng/Kg	0.675U ng/Kg
SL-041-SA5A-SB-4.0-5.0(RES)	OCDF	0.127 ng/Kg	0.127U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.539 ng/Kg	0.539U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0955 ng/Kg	0.0955U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0352 ng/Kg	0.0352U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0494 ng/Kg	0.0494U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.0531 ng/Kg	0.0531U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0374 ng/Kg	0.0374U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.0697 ng/Kg	0.0697U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0404 ng/Kg	0.0404U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0280 ng/Kg	0.0280U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0621 ng/Kg	0.0621U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0796 ng/Kg	0.0796U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0124 ng/Kg	0.0124U ng/Kg
SL-044-SA5A-SB-3.0-4.0(RES)	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.267 ng/Kg	0.267U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0599 ng/Kg	0.0599U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0368 ng/Kg	0.0368U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0117 ng/Kg	0.0117U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0148 ng/Kg	0.0148U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0217 ng/Kg	0.0217U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0109 ng/Kg	0.0109U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0302 ng/Kg	0.0302U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0130 ng/Kg	0.0130U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0366 ng/Kg	0.0366U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0494 ng/Kg	0.0494U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-052-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0180 ng/Kg	0.0180U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	OCDD	0.654 ng/Kg	0.654U ng/Kg
SL-052-SA5A-SB-4.0-5.0(RES)	OCDF	0.122 ng/Kg	0.122U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.726 ng/Kg	0.726U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0704 ng/Kg	0.0704U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0422 ng/Kg	0.0422U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0426 ng/Kg	0.0426U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.146 ng/Kg	0.146U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0569 ng/Kg	0.0569U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.157 ng/Kg	0.157U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.0805 ng/Kg	0.0805U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.0758 ng/Kg	0.0758U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0326 ng/Kg	0.0326U ng/Kg
SL-058-SA5A-SB-3.0-4.0(RES)	OCDF	0.236 ng/Kg	0.236U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.383 ng/Kg	0.383U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.137 ng/Kg	0.137U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HxCDD	0.0476 ng/Kg	0.0476U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.0586 ng/Kg	0.0586U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.125 ng/Kg	0.125U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.0647 ng/Kg	0.0647U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.277 ng/Kg	0.277U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDD	0.148 ng/Kg	0.148U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8-PECDF	0.126 ng/Kg	0.126U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.145 ng/Kg	0.145U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0309 ng/Kg	0.0309U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDF	0.0304 ng/Kg	0.0304U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	OCDD	0.827 ng/Kg	0.827U ng/Kg
SL-059-SA5A-SB-3.0-4.0(RES)	OCDF	0.346 ng/Kg	0.346U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0468 ng/Kg	0.0468U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.108 ng/Kg	0.108U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0803 ng/Kg	0.0803U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.117 ng/Kg	0.117U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0401 ng/Kg	0.0401U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.133 ng/Kg	0.133U ng/Kg
SL-062-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.188 ng/Kg	0.188U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.320 ng/Kg	0.320U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.126 ng/Kg	0.126U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0726 ng/Kg	0.0726U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0214 ng/Kg	0.0214U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0211 ng/Kg	0.0211U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0432 ng/Kg	0.0432U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0303 ng/Kg	0.0303U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0653 ng/Kg	0.0653U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0650 ng/Kg	0.0650U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0232 ng/Kg	0.0232U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0354 ng/Kg	0.0354U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0752 ng/Kg	0.0752U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0749 ng/Kg	0.0749U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0167 ng/Kg	0.0167U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	OCDD	0.952 ng/Kg	0.952U ng/Kg
SL-065-SA5A-SB-4.0-5.0(RES)	OCDF	0.217 ng/Kg	0.217U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.140 ng/Kg	0.140U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0647 ng/Kg	0.0647U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.138 ng/Kg	0.138U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.170 ng/Kg	0.170U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.125 ng/Kg	0.125U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0557 ng/Kg	0.0557U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.162 ng/Kg	0.162U ng/Kg
SL-067-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.282 ng/Kg	0.282U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.484 ng/Kg	0.484U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0852 ng/Kg	0.0852U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.135 ng/Kg	0.135U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.184 ng/Kg	0.184U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.268 ng/Kg	0.268U ng/Kg
SL-094-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0256 ng/Kg	0.0256U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-094-SA8N-SS-0.0-0.5(RES)	OCDF	1.02 ng/Kg	1.02U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.458 ng/Kg	0.458U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0642 ng/Kg	0.0642U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0722 ng/Kg	0.0722U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0967 ng/Kg	0.0967U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.339 ng/Kg	0.339U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0993 ng/Kg	0.0993U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.170 ng/Kg	0.170U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.222 ng/Kg	0.222U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.103 ng/Kg	0.103U ng/Kg
SL-095-SA8N-SS-0.0-0.5(RES)	OCDF	0.955 ng/Kg	0.955U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.547 ng/Kg	0.547U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.104 ng/Kg	0.104U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0704 ng/Kg	0.0704U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0833 ng/Kg	0.0833U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.172 ng/Kg	0.172U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.113 ng/Kg	0.113U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.281 ng/Kg	0.281U ng/Kg
SL-096-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.106 ng/Kg	0.106U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.620 ng/Kg	0.620U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0972 ng/Kg	0.0972U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0670 ng/Kg	0.0670U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.104 ng/Kg	0.104U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0953 ng/Kg	0.0953U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.213 ng/Kg	0.213U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-097-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.206 ng/Kg	0.206U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.760 ng/Kg	0.760U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.191 ng/Kg	0.191U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.132 ng/Kg	0.132U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.315 ng/Kg	0.315U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.246 ng/Kg	0.246U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.176 ng/Kg	0.176U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.248 ng/Kg	0.248U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-122-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.483 ng/Kg	0.483U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0549 ng/Kg	0.0549U ng/Kg
SL-122-SA8N-SS-0.0-0.5(RES)	OCDF	1.14 ng/Kg	1.14U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.08 ng/Kg	1.08U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.133 ng/Kg	0.133U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.168 ng/Kg	0.168U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.199 ng/Kg	0.199U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.351 ng/Kg	0.351U ng/Kg
SL-135-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.113 ng/Kg	0.113U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0749 ng/Kg	0.0749U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0676 ng/Kg	0.0676U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0877 ng/Kg	0.0877U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.197 ng/Kg	0.197U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0451 ng/Kg	0.0451U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.121 ng/Kg	0.121U ng/Kg
SL-141-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.205 ng/Kg	0.205U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDD	0.726 ng/Kg	0.726U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,6,7,8-HPCDF	0.232 ng/Kg	0.232U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HxCDD	0.0259 ng/Kg	0.0259U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,4,7,8-HXCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDD	0.0489 ng/Kg	0.0489U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,6,7,8-HXCDF	0.0538 ng/Kg	0.0538U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDD	0.0838 ng/Kg	0.0838U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8,9-HXCDF	0.0581 ng/Kg	0.0581U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDD	0.0273 ng/Kg	0.0273U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	1,2,3,7,8-PECDF	0.0269 ng/Kg	0.0269U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	2,3,4,6,7,8-HXCDF	0.0600 ng/Kg	0.0600U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	2,3,4,7,8-PECDF	0.0501 ng/Kg	0.0501U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	2,3,7,8-TCDD	0.0138 ng/Kg	0.0138U ng/Kg
SL-242-SA5A-SB-2.5-3.5(RES)	OCDF	0.728 ng/Kg	0.728U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.266 ng/Kg	0.266U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0883 ng/Kg	0.0883U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0223 ng/Kg	0.0223U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0140 ng/Kg	0.0140U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0209 ng/Kg	0.0209U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.00788 ng/Kg	0.00788U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0197 ng/Kg	0.0197U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0450 ng/Kg	0.0450U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0307 ng/Kg	0.0307U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0559 ng/Kg	0.0559U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0189 ng/Kg	0.0189U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	OCDD	1.19 ng/Kg	1.19U ng/Kg
SL-243-SA5A-SB-4.0-5.0(RES)	OCDF	0.206 ng/Kg	0.206U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
MOISTURE	9.0	8.6	5		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-058-SA5A-SB-3.0-4.0	DUP14-SA5A-QC-041411			
1,2,3,7,8,9-HXCDD	0.257	0.218	16	50.00	No Qualifiers Applied
1,2,3,4,6,7,8-HPCDD	0.726	0.326	76	50.00	
1,2,3,4,6,7,8-HPCDF	0.142	0.365	88	50.00	
1,2,3,4,7,8,9-HPCDF	0.0704	0.278	119	50.00	
1,2,3,4,7,8-HxCDD	0.0422	0.197	129	50.00	
1,2,3,4,7,8-HXCDF	0.0426	0.221	135	50.00	
1,2,3,6,7,8-HXCDD	0.146	0.256	55	50.00	
1,2,3,6,7,8-HXCDF	0.0569	0.193	109	50.00	
1,2,3,7,8,9-HXCDF	0.157	0.267	52	50.00	J(all detects)
1,2,3,7,8-PECDD	0.0805	0.270	108	50.00	UJ(all non-detects)
1,2,3,7,8-PECDF	0.0758	0.317	123	50.00	
2,3,4,6,7,8-HXCDF	0.0542	0.212	119	50.00	
2,3,4,7,8-PECDF	0.0681	0.309	128	50.00	
2,3,7,8-TCDD	0.0326	0.0705	74	50.00	
2,3,7,8-TCDF	1.09 U	0.240	200	50.00	
OCDD	12.1	0.851	174	50.00	
OCDF	0.236	0.569	83	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP14-SA5A-QC-041411	1,2,3,4,6,7,8-HPCDD	JBQ	0.326	5.46	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.365	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.278	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.197	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.221	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.256	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.193	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.218	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.267	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.270	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.317	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.212	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.309	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0705	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.240	1.09	PQL	ng/Kg	
	OCDD	JB	0.851	10.9	PQL	ng/Kg	
	OCDF	JB	0.569	10.9	PQL	ng/Kg	
SL-041-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.215	5.56	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0612	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0429	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0147	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0158	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0223	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0217	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0525	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0736	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0196	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0184	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0441	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0436	5.56	PQL	ng/Kg	
	OCDD	JB	0.675	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.127	11.1	PQL	ng/Kg	
SL-044-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.539	5.53	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.142	5.53	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0955	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0352	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0494	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0531	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0374	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0697	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.119	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0404	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0280	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0621	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0796	5.53	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0124	1.11	PQL	ng/Kg	
	OCDD	JB	4.24	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.302	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-052-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.267	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0599	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0368	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0117	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0148	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0217	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0109	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	0.0302	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0130	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0366	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0494	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0180	1.15	PQL	ng/Kg	
	OCDD	JB	0.654	11.5	PQL	ng/Kg	
	OCDF	JB	0.122	11.5	PQL	ng/Kg	
SL-058-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.726	5.43	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.142	5.43	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0704	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0422	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0426	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.146	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0569	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.257	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.157	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0805	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0758	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0542	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0681	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0326	1.09	PQL	ng/Kg	
	OCDF	JBQ	0.236	10.9	PQL	ng/Kg	
SL-059-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.383	5.59	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.137	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.164	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0476	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0586	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.125	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0647	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.298	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.277	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.148	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.126	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.161	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.145	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0309	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0304	1.12	PQL	ng/Kg	
	OCDD	JB	0.827	11.2	PQL	ng/Kg	
	OCDF	JB	0.346	11.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	1.56	5.67	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.60	5.67	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0542	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0468	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.445	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.108	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0803	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.141	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.117	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0401	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.331	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.133	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.188	5.67	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.120	1.13	PQL	ng/Kg	
	OCDF	JB	6.87	11.3	PQL	ng/Kg	
SL-065-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.320	5.50	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.126	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0726	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0214	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0211	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0432	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0303	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0653	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0650	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0232	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0354	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0752	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0749	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0167	1.10	PQL	ng/Kg	
	OCDD	JB	0.952	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.217	11.0	PQL	ng/Kg	
SL-067-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.73	5.98	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	2.01	5.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.140	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0647	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.584	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.253	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.138	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.170	5.98	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.125	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0557	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.621	5.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.162	5.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.282	5.98	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.198	1.20	PQL	ng/Kg	
	OCDF	JB	9.02	12.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-094-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.63	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.484	5.35	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0852	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.296	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.344	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.150	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.467	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.575	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.184	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.276	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.139	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.268	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0256	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.125	1.07	PQL	ng/Kg	
	OCDF	JB	1.02	10.7	PQL	ng/Kg	
SL-095-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.68	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.458	5.63	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0642	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0722	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.240	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.295	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0967	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.388	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.339	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0993	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.170	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.121	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.222	5.63	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0146	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.103	1.13	PQL	ng/Kg	
	OCDF	JB	0.955	11.3	PQL	ng/Kg	
SL-096-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.87	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.547	5.32	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.104	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0704	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.337	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.335	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0833	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.428	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.459	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.172	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.113	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.281	5.32	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.106	1.06	PQL	ng/Kg	
	OCDF	JB	1.21	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-097-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.09	5.72	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.620	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0972	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0670	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.333	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.481	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.104	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.714	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.804	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0953	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.213	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.114	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.206	5.72	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.136	1.14	PQL	ng/Kg	
	OCDF	JB	1.42	11.4	PQL	ng/Kg	
SL-122-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.88	5.19	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.760	5.19	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.191	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.132	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.315	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.236	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.179	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.353	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.246	5.19	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.176	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.323	5.19	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.248	5.19	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.483	5.19	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0549	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.363	1.04	PQL	ng/Kg	
	OCDF	JB	1.14	10.4	PQL	ng/Kg	
SL-135-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.08	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.133	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.168	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.251	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.561	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.151	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.543	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.251	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.199	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.753	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.140	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.351	5.42	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.113	1.08	PQL	ng/Kg	
	OCDF	JB	2.80	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX072 **Laboratory: LL**

EDD Filename: DX072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-141-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.01	5.68	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.51	5.68	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0749	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0676	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.485	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.141	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0877	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.197	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.118	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0451	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.758	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.121	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.205	5.68	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.144	1.14	PQL	ng/Kg	
	OCDF	JB	6.09	11.4	PQL	ng/Kg	
SL-242-SA5A-SB-2.5-3.5	1,2,3,4,6,7,8-HPCDD	JB	0.726	5.66	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.232	5.66	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0702	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0259	5.66	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0546	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0489	5.66	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0538	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0838	5.66	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0581	5.66	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0273	5.66	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0269	5.66	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0600	5.66	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0501	5.66	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0138	1.13	PQL	ng/Kg	
	OCDD	JB	6.93	11.3	PQL	ng/Kg	
	OCDF	JB	0.728	11.3	PQL	ng/Kg	
SL-243-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.266	5.70	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0883	5.70	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0223	5.70	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0140	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0209	5.70	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.00788	5.70	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0197	5.70	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0450	5.70	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0307	5.70	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0559	5.70	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0189	1.14	PQL	ng/Kg	
	OCDD	JB	1.19	11.4	PQL	ng/Kg	
	OCDF	JB	0.206	11.4	PQL	ng/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: April 14 through April 19, 2011

LDC Report Date: August 10, 2011

Matrix: Soil

Parameters: Dioxins/Dibenzofurans

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DX072

Sample Identification

DUP14-SA5A-QC-041411
SL-058-SA5A-SB-3.0-4.0
SL-059-SA5A-SB-3.0-4.0
SL-065-SA5A-SB-4.0-5.0
SL-242-SA5A-SB-2.5-3.5
SL-062-SA8N-SS-0.0-0.5
SL-067-SA8N-SS-0.0-0.5
SL-141-SA8N-SS-0.0-0.5
SL-041-SA5A-SB-4.0-5.0
SL-044-SA5A-SB-3.0-4.0
SL-052-SA5A-SB-4.0-5.0
SL-243-SA5A-SB-4.0-5.0
SL-094-SA8N-SS-0.0-0.5
SL-095-SA8N-SS-0.0-0.5
SL-096-SA8N-SS-0.0-0.5
SL-097-SA8N-SS-0.0-0.5
SL-122-SA8N-SS-0.0-0.5
SL-135-SA8N-SS-0.0-0.5
SL-058-SA5A-SB-3.0-4.0MS
SL-058-SA5A-SB-3.0-4.0MSD

Introduction

This data review covers 20 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 1613B for Polychlorinated Dioxins/Dibenzofurans.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and the USEPA Contract Laboratory Program National Functional Guidelines for Polychlorinated Dioxins/Dibenzofurans Data Review (September 2005).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

NJ Presumptive evidence of presence of the compound at an estimated quantity.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. HRGC/HRMS Instrument Performance Check

Instrument performance was checked at the required daily frequency.

The chromatographic resolution between 2,3,7,8-TCDD and the peaks representing any other unlabeled TCDD isomers was resolved with a valley of less than or equal to 25%.

PFK and static resolving power were within validation criteria.

III. Initial Calibration

A five point initial calibration was performed as required by the method.

Percent relative standard deviations (%RSD) were less than or equal to 20.0% for unlabeled compounds and less than or equal to 35.0% for labeled compounds.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

The minimum S/N ratio was greater than or equal to 10 for each unlabeled compound and labeled compound.

IV. Routine Calibration (Continuing)

Routine calibration was performed at the required frequencies.

All of the routine calibration percent differences (%D) between the initial calibration RRF and the routine calibration RRF were within QC limits.

The ion abundance ratios for all PCDDs and PCDFs were within validation criteria.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No polychlorinated dioxin/dibenzofuran contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
BLK108002	4/18/11	2,3,7,8-TCDF	0.0112 ng/Kg	SL-059-SA5A-SB-3.0-4.0
		2,3,7,8-TCDD	0.0284 ng/Kg	SL-065-SA5A-SB-4.0-5.0
		1,2,3,7,8-PeCDF	0.0353 ng/Kg	SL-242-SA5A-SB-2.5-3.5
		2,3,4,7,8-PeCDF	0.0901 ng/Kg	SL-062-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDD	0.0354 ng/Kg	SL-067-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDF	0.0844 ng/Kg	SL-141-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HxCDF	0.0439 ng/Kg	SL-041-SA5A-SB-4.0-5.0
		2,3,4,6,7,8-HxCDF	0.0328 ng/Kg	SL-044-SA5A-SB-3.0-4.0
		1,2,3,4,7,8-HxCDD	0.0288 ng/Kg	SL-052-SA5A-SB-4.0-5.0
		1,2,3,6,7,8-HxCDD	0.0367 ng/Kg	SL-243-SA5A-SB-4.0-5.0
		1,2,3,7,8,9-HxCDD	0.0531 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0731 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.0892 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.194 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0492 ng/Kg	
		OCDD	0.428 ng/Kg	
		OCDF	0.158 ng/Kg	
BLK115002	4/25/11	2,3,7,8-TCDF	0.0227 ng/Kg	SL-094-SA8N-SS-0.0-0.5
		2,3,7,8-TCDD	0.0462 ng/Kg	SL-095-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDF	0.0538 ng/Kg	SL-096-SA8N-SS-0.0-0.5
		2,3,4,7,8-PeCDF	0.0593 ng/Kg	SL-097-SA8N-SS-0.0-0.5
		1,2,3,7,8-PeCDD	0.0571 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0469 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0401 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.0651 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0421 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0348 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0543 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0854 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.126 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.231 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0849 ng/Kg	
		OCDD	0.458 ng/Kg	
		OCDF	0.215 ng/Kg	
BLK122003	5/26/11	2,3,7,8-TCDD	0.0183 ng/Kg	SL-058-SA5A-SB-3.0-4.0
		1,2,3,7,8-PeCDF	0.0563 ng/Kg	
		2,3,4,7,8-PeCDF	0.0781 ng/Kg	
		1,2,3,7,8-PeCDD	0.0512 ng/Kg	
		1,2,3,4,7,8-HxCDF	0.0612 ng/Kg	
		1,2,3,6,7,8-HxCDF	0.0458 ng/Kg	
		2,3,4,6,7,8-HxCDF	0.0520 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0242 ng/Kg	
		1,2,3,6,7,8-HxCDD	0.0426 ng/Kg	
		1,2,3,7,8,9-HxCDD	0.0398 ng/Kg	
		1,2,3,7,8,9-HxCDF	0.0821 ng/Kg	
		1,2,3,4,6,7,8-HpCDF	0.0881 ng/Kg	
		1,2,3,4,6,7,8-HpCDD	0.173 ng/Kg	
		1,2,3,4,7,8,9-HpCDF	0.0487 ng/Kg	
		OCDD	0.359 ng/Kg	
		OCDF	0.148 ng/Kg	

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
BLK116001	4/26/11	2,3,7,8-TCDF 2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0540 ng/Kg 0.0319 ng/Kg 0.0631 ng/Kg 0.117 ng/Kg 0.0569 ng/Kg 0.0838 ng/Kg 0.0727 ng/Kg 0.0953 ng/Kg 0.0389 ng/Kg 0.0462 ng/Kg 0.0481 ng/Kg 0.0641 ng/Kg 0.221 ng/Kg 0.211 ng/Kg 0.0916 ng/Kg 0.517 ng/Kg 0.277 ng/Kg	SL-122-SA8N-SS-0.0-0.5 SL-135-SA8N-SS-0.0-0.5
BLK116002	4/26/11	2,3,7,8-TCDF 2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0380 ng/Kg 0.0262 ng/Kg 0.0555 ng/Kg 0.0640 ng/Kg 0.0658 ng/Kg 0.0601 ng/Kg 0.104 ng/Kg 0.0285 ng/Kg 0.0370 ng/Kg 0.0614 ng/Kg 0.0973 ng/Kg 0.149 ng/Kg 0.247 ng/Kg 0.0979 ng/Kg 0.449 ng/Kg 0.273 ng/Kg	DUP14-SA5A-QC-041411

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>5X blank contaminants) than the concentrations found in the associated method blanks with the following exceptions:

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-059-SA5A-SB-3.0-4.0	2,3,7,8-TCDF 2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0304 ng/Kg 0.0309 ng/Kg 0.126 ng/Kg 0.145 ng/Kg 0.148 ng/Kg 0.0586 ng/Kg 0.0647 ng/Kg 0.161 ng/Kg 0.0476 ng/Kg 0.125 ng/Kg 0.298 ng/Kg 0.277 ng/Kg 0.137 ng/Kg 0.383 ng/Kg 0.164 ng/Kg 0.827 ng/Kg 0.346 ng/Kg	0.0304U ng/Kg 0.0309U ng/Kg 0.126U ng/Kg 0.145U ng/Kg 0.148U ng/Kg 0.0586U ng/Kg 0.0647U ng/Kg 0.161U ng/Kg 0.0476U ng/Kg 0.125U ng/Kg 0.298U ng/Kg 0.277U ng/Kg 0.137U ng/Kg 0.383U ng/Kg 0.164U ng/Kg 0.827U ng/Kg 0.346U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-065-SA5A-SB-4.0-5.0	2,3,7,8-TCDD	0.0167 ng/Kg	0.0167U ng/Kg
	1,2,3,7,8-PeCDF	0.0354 ng/Kg	0.0354U ng/Kg
	2,3,4,7,8-PeCDF	0.0749 ng/Kg	0.0749U ng/Kg
	1,2,3,7,8-PeCDD	0.0232 ng/Kg	0.0232U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0211 ng/Kg	0.0211U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0303 ng/Kg	0.0303U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0752 ng/Kg	0.0752U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0214 ng/Kg	0.0214U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0432 ng/Kg	0.0432U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0653 ng/Kg	0.0653U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0650 ng/Kg	0.0650U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.126 ng/Kg	0.126U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.320 ng/Kg	0.320U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0726 ng/Kg	0.0726U ng/Kg
	OCDD	0.952 ng/Kg	0.952U ng/Kg
	OCDF	0.217 ng/Kg	0.217U ng/Kg
SL-242-SA5A-SB-2.5-3.5	2,3,7,8-TCDD	0.0138 ng/Kg	0.0138U ng/Kg
	1,2,3,7,8-PeCDF	0.0269 ng/Kg	0.0269U ng/Kg
	2,3,4,7,8-PeCDF	0.0501 ng/Kg	0.0501U ng/Kg
	1,2,3,7,8-PeCDD	0.0273 ng/Kg	0.0273U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0546 ng/Kg	0.0546U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0538 ng/Kg	0.0538U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0600 ng/Kg	0.0600U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0259 ng/Kg	0.0259U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0489 ng/Kg	0.0489U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0838 ng/Kg	0.0838U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0581 ng/Kg	0.0581U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.232 ng/Kg	0.232U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.726 ng/Kg	0.726U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0702 ng/Kg	0.0702U ng/Kg
	OCDF	0.728 ng/Kg	0.728U ng/Kg
SL-062-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.188 ng/Kg	0.188U ng/Kg
	1,2,3,7,8-PeCDD	0.0401 ng/Kg	0.0401U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0803 ng/Kg	0.0803U ng/Kg
	2,3,4,6,7,8-HxCDF	0.133 ng/Kg	0.133U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0468 ng/Kg	0.0468U ng/Kg
	1,2,3,6,7,8-HxCDD	0.108 ng/Kg	0.108U ng/Kg
	1,2,3,7,8,9-HxCDD	0.141 ng/Kg	0.141U ng/Kg
	1,2,3,7,8,9-HxCDF	0.117 ng/Kg	0.117U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0542 ng/Kg	0.0542U ng/Kg
SL-067-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.282 ng/Kg	0.282U ng/Kg
	1,2,3,7,8-PeCDD	0.0557 ng/Kg	0.0557U ng/Kg
	1,2,3,6,7,8-HxCDF	0.138 ng/Kg	0.138U ng/Kg
	2,3,4,6,7,8-HxCDF	0.162 ng/Kg	0.162U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0647 ng/Kg	0.0647U ng/Kg
	1,2,3,7,8,9-HxCDD	0.170 ng/Kg	0.170U ng/Kg
	1,2,3,7,8,9-HxCDF	0.125 ng/kg	0.125U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.140 ng/Kg	0.140U ng/Kg
SL-141-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF	0.205 ng/Kg	0.205U ng/Kg
	1,2,3,7,8-PeCDD	0.0451 ng/Kg	0.0451U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0877 ng/Kg	0.0877U ng/Kg
	2,3,4,6,7,8-HxCDF	0.121 ng/Kg	0.121U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0676 ng/Kg	0.0676U ng/Kg
	1,2,3,6,7,8-HxCDD	0.141 ng/Kg	0.141U ng/Kg
	1,2,3,7,8,9-HxCDD	0.197 ng/Kg	0.197U ng/Kg
	1,2,3,7,8,9-HxCDF	0.118 ng/Kg	0.118U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0749 ng/Kg	0.0749U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-041-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0184 ng/Kg	0.0184U ng/Kg
	2,3,4,7,8-PeCDF	0.0436 ng/Kg	0.0436U ng/Kg
	1,2,3,7,8-PeCDD	0.0196 ng/Kg	0.0196U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0158 ng/Kg	0.0158U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0217 ng/Kg	0.0217U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0441 ng/Kg	0.0441U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0147 ng/Kg	0.0147U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0223 ng/Kg	0.0223U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0525 ng/Kg	0.0525U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0736 ng/Kg	0.0736U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.0612 ng/Kg	0.0612U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.215 ng/Kg	0.215U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0429 ng/Kg	0.0429U ng/Kg
	OCDD	0.675 ng/Kg	0.675U ng/Kg
	OCDF	0.127 ng/Kg	0.127U ng/Kg
SL-044-SA5A-SB-3.0-4.0	2,3,7,8-TCDF	0.0124 ng/Kg	0.0124U ng/Kg
	1,2,3,7,8-PeCDF	0.0280 ng/Kg	0.0280U ng/Kg
	2,3,4,7,8-PeCDF	0.0796 ng/Kg	0.0796U ng/Kg
	1,2,3,7,8-PeCDD	0.0404 ng/Kg	0.0404U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0494 ng/Kg	0.0494U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0374 ng/Kg	0.0374U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0621 ng/Kg	0.0621U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0352 ng/Kg	0.0352U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0531 ng/Kg	0.0531U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0697 ng/Kg	0.0697U ng/Kg
	1,2,3,7,8,9-HxCDF	0.119 ng/Kg	0.119U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.142 ng/Kg	0.142U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.539 ng/Kg	0.539U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0955 ng/Kg	0.0955U ng/Kg
	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-052-SA5A-SB-4.0-5.0	2,3,7,8-TCDF	0.0180 ng/Kg	0.0180U ng/Kg
	1,2,3,7,8-PeCDF	0.0130 ng/Kg	0.0130U ng/Kg
	2,3,4,7,8-PeCDF	0.0494 ng/Kg	0.0494U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0148 ng/Kg	0.0148U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0109 ng/Kg	0.0109U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0366 ng/Kg	0.0366U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0117 ng/Kg	0.0117U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0217 ng/Kg	0.0217U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0302 ng/Kg	0.0302U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.0599 ng/Kg	0.0599U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.267 ng/Kg	0.267U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0368 ng/Kg	0.0368U ng/Kg
	OCDD	0.654 ng/Kg	0.654U ng/Kg
	OCDF	0.122 ng/Kg	0.122U ng/Kg
SL-243-SA5A-SB-4.0-5.0	2,3,7,8-TCDF	0.0189 ng/Kg	0.0189U ng/Kg
	2,3,4,7,8-PeCDF	0.0559 ng/Kg	0.0559U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0140 ng/Kg	0.0140U ng/Kg
	1,2,3,6,7,8-HxCDF	0.00788 ng/Kg	0.00788U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0307 ng/Kg	0.0307U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0209 ng/Kg	0.0209U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0197 ng/Kg	0.0197U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0450 ng/Kg	0.0450U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.0833 ng/Kg	0.0833U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.266 ng/Kg	0.266U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0223 ng/Kg	0.0223U ng/Kg
	OCDD	1.19 ng/Kg	1.19U ng/Kg
	OCDF	0.206 ng/Kg	0.206U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-094-SA8N-SS-0.0-0.5	2,3,7,8-TCDD	0.0256 ng/Kg	0.0256U ng/Kg
	2,3,4,7,8-PeCDF	0.268 ng/Kg	0.268U ng/Kg
	1,2,3,7,8-PeCDD	0.184 ng/Kg	0.184U ng/Kg
	1,2,3,6,7,8-HxCDF	0.150 ng/Kg	0.150U ng/Kg
	2,3,4,6,7,8-HxCDF	0.139 ng/Kg	0.139U ng/Kg
	1,2,3,4,7,8-HxCDD	0.135 ng/Kg	0.135U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.484 ng/Kg	0.484U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0852 ng/Kg	0.0852U ng/Kg
	OCDF	1.02 ng/Kg	1.02U ng/Kg
SL-095-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	0.103 ng/Kg	0.103U ng/Kg
	2,3,7,8-TCDD	0.0146 ng/Kg	0.0146U ng/Kg
	1,2,3,7,8-PeCDF	0.170 ng/Kg	0.170U ng/Kg
	2,3,4,7,8-PeCDF	0.222 ng/Kg	0.222U ng/Kg
	1,2,3,7,8-PeCDD	0.0993 ng/Kg	0.0993U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0967 ng/Kg	0.0967U ng/Kg
	2,3,4,6,7,8-HxCDF	0.121 ng/Kg	0.121U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0722 ng/Kg	0.0722U ng/Kg
	1,2,3,7,8,9-HxCDF	0.339 ng/Kg	0.339U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.458 ng/Kg	0.458U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0642 ng/Kg	0.0642U ng/Kg
	OCDF	0.955 ng/Kg	0.955U ng/Kg
SL-096-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	0.106 ng/Kg	0.106U ng/Kg
	1,2,3,7,8-PeCDF	0.172 ng/Kg	0.172U ng/Kg
	2,3,4,7,8-PeCDF	0.281 ng/Kg	0.281U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0833 ng/Kg	0.0833U ng/Kg
	2,3,4,6,7,8-HxCDF	0.113 ng/Kg	0.113U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0704 ng/Kg	0.0704U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.547 ng/Kg	0.547U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.104 ng/Kg	0.104U ng/Kg
SL-097-SA8N-SS-0.0-0.5	1,2,3,7,8-PeCDF	0.213 ng/Kg	0.213U ng/Kg
	2,3,4,7,8-PeCDF	0.206 ng/Kg	0.206U ng/Kg
	1,2,3,7,8-PeCDD	0.0953 ng/Kg	0.0953U ng/Kg
	1,2,3,6,7,8-HxCDF	0.104 ng/Kg	0.104U ng/Kg
	2,3,4,6,7,8-HxCDF	0.114 ng/Kg	0.114U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0670 ng/Kg	0.0670U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.620 ng/Kg	0.620U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0972 ng/Kg	0.0972U ng/Kg
SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDD	0.0326 ng/Kg	0.0326U ng/Kg
	1,2,3,7,8-PeCDF	0.0758 ng/Kg	0.0758U ng/Kg
	2,3,4,7,8-PeCDF	0.0681 ng/Kg	0.0681U ng/Kg
	1,2,3,7,8-PeCDD	0.0805 ng/Kg	0.0805U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0426 ng/Kg	0.0426U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0569 ng/Kg	0.0569U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0542 ng/Kg	0.0542U ng/Kg
	1,2,3,4,7,8-HxCDD	0.0422 ng/Kg	0.0422U ng/Kg
	1,2,3,6,7,8-HxCDD	0.146 ng/Kg	0.146U ng/Kg
	1,2,3,7,8,9-HxCDF	0.157 ng/Kg	0.157U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.142 ng/Kg	0.142U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.726 ng/Kg	0.726U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0704 ng/Kg	0.0704U ng/Kg
	OCDF	0.236 ng/Kg	0.236U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-122-SA8N-SS-0.0-0.5	2,3,7,8-TCDD	0.0549 ng/Kg	0.0549U ng/Kg
	2,3,4,7,8-PeCDF	0.483 ng/Kg	0.483U ng/Kg
	1,2,3,7,8-PeCDD	0.176 ng/Kg	0.176U ng/Kg
	1,2,3,4,7,8-HxCDF	0.315 ng/Kg	0.315U ng/Kg
	1,2,3,6,7,8-HxCDF	0.179 ng/Kg	0.179U ng/Kg
	2,3,4,6,7,8-HxCDF	0.248 ng/Kg	0.248U ng/Kg
	1,2,3,4,7,8-HxCDD	0.132 ng/Kg	0.132U ng/Kg
	1,2,3,7,8,9-HxCDF	0.246 ng/Kg	0.246U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.760 ng/Kg	0.760U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.191 ng/Kg	0.191U ng/Kg
	OCDF	1.14 ng/Kg	1.14U ng/Kg
SL-135-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	0.113 ng/Kg	0.113U ng/Kg
	2,3,4,7,8-PeCDF	0.3514 ng/Kg	0.3514U ng/Kg
	1,2,3,7,8-PeCDD	0.199 ng/Kg	0.199U ng/Kg
	1,2,3,4,7,8-HxCDF	0.251 ng/Kg	0.251U ng/Kg
	1,2,3,6,7,8-HxCDF	0.151 ng/Kg	0.151U ng/Kg
	2,3,4,6,7,8-HxCDF	0.140 ng/Kg	0.140U ng/Kg
	1,2,3,4,7,8-HxCDD	0.168 ng/Kg	0.168U ng/Kg
	1,2,3,7,8,9-HxCDF	0.251 ng/Kg	0.251U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.08 ng/Kg	1.08U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.133 ng/Kg	0.133U ng/Kg
DUP14-SA5A-QC-041411	2,3,7,8-TCDD	0.0705 ng/Kg	0.0705U ng/Kg
	2,3,4,7,8-PeCDF	0.309 ng/Kg	0.309U ng/Kg
	1,2,3,4,7,8-HxCDF	0.221 ng/Kg	0.221U ng/Kg
	1,2,3,6,7,8-HxCDF	0.193 ng/Kg	0.193U ng/Kg
	2,3,4,6,7,8-HxCDF	0.212 ng/Kg	0.212U ng/Kg
	1,2,3,7,8,9-HxCDD	0.218 ng/Kg	0.218U ng/Kg
	1,2,3,7,8,9-HxCDF	0.267 ng/Kg	0.267U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.365 ng/Kg	0.365U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.326 ng/Kg	0.326U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.278 ng/Kg	0.278U ng/Kg
	OCDD	0.851 ng/Kg	0.851U ng/Kg
	OCDF	0.569 ng/Kg	0.569U ng/Kg

No field blanks were identified in this SDG.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. The percent recoveries (%R) were within the QC limits.

VIII. Regional Quality Assurance and Quality Control

Not applicable.

IX. Internal Standards

All internal standard recoveries were within QC limits.

X. Target Compound Identifications

All target compound identifications were within validation criteria.

XI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria.

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DX072	All compounds reported below the RL.	J (all detects)	A

XII. System Performance

The system performance was acceptable.

XIII. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XIV. Field Duplicates

Samples DUP14-SA5A-QC-041411 and SL-058-SA5A-SB-3.0-4.0 were identified as field duplicates. No polychlorinated dioxins/dibenzofurans were detected in any of the samples with the following exceptions:

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP14-SA5A-QC-041411	SL-058-SA5A-SB-3.0-4.0			
2,3,7,8-TCDD	0.0705	0.0326	74 (≤50)	J (all detects)	A
1,2,3,7,8-PeCDD	0.270	0.0805	108 (≤50)	J (all detects)	A
1,2,3,4,7,8-HxCDD	0.197	0.0422	129 (≤50)	J (all detects)	A
1,2,3,6,7,8-HxCDD	0.256	0.146	55 (≤50)	J (all detects)	A
1,2,3,7,8,9-HxCDD	0.218	0.257	16 (≤50)	-	-

Compound	Concentration (ng/Kg)		RPD (Limits)	Flags	A or P
	DUP14-SA5A-QC-041411	SL-058-SA5A-SB-3.0-4.0			
1,2,3,4,6,7,8-HpCDD	0.326	0.726	76 (≤50)	J (all detects)	A
OCDD	0.851	12.1	174 (≤50)	J (all detects)	A
2,3,7,8-TCDF	0.240	0.0124U	200 (≤50)	J (all detects) UJ (all non-detects)	A
1,2,3,7,8-PeCDF	0.317	0.0758	123 (≤50)	J (all detects)	A
2,3,4,7,8-PeCDF	0.309	0.0681	128 (≤50)	J (all detects)	A
1,2,3,4,7,8-HxCDF	0.221	0.0426	135 (≤50)	J (all detects)	A
1,2,3,6,7,8-HxCDF	0.193	0.0569	109 (≤50)	J (all detects)	A
1,2,3,7,8,9-HxCDF	0.267	0.157	52 (≤50)	J (all detects)	A
2,3,4,6,7,8-HxCDF	0.212	0.0542	119 (≤50)	J (all detects)	A
1,2,3,4,6,7,8-HpCDF	0.365	0.142	88 (≤50)	J (all detects)	A
1,2,3,4,7,8,9-HpCDF	0.278	0.0704	119 (≤50)	J (all detects)	A
OCDF	0.569	0.236	83 (≤50)	J (all detects)	A

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Data Qualification Summary - SDG DX072

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DX072	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0 SL-059-SA5A-SB-3.0-4.0 SL-065-SA5A-SB-4.0-5.0 SL-242-SA5A-SB-2.5-3.5 SL-062-SA8N-SS-0.0-0.5 SL-067-SA8N-SS-0.0-0.5 SL-141-SA8N-SS-0.0-0.5 SL-041-SA5A-SB-4.0-5.0 SL-044-SA5A-SB-3.0-4.0 SL-052-SA5A-SB-4.0-5.0 SL-243-SA5A-SB-4.0-5.0 SL-094-SA8N-SS-0.0-0.5 SL-095-SA8N-SS-0.0-0.5 SL-096-SA8N-SS-0.0-0.5 SL-097-SA8N-SS-0.0-0.5 SL-122-SA8N-SS-0.0-0.5 SL-135-SA8N-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DX072	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDD 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,4,6,7,8-HpCDD OCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 1,2,3,7,8,9-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)
DX072	DUP14-SA5A-QC-041411 SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDF	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG DX072

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-059-SA5A-SB-3.0-4.0	2,3,7,8-TCDF 2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0304U ng/Kg 0.0309U ng/Kg 0.126U ng/Kg 0.145U ng/Kg 0.148U ng/Kg 0.0586U ng/Kg 0.0647U ng/Kg 0.161U ng/Kg 0.0476U ng/Kg 0.125U ng/Kg 0.298U ng/Kg 0.277U ng/Kg 0.137U ng/Kg 0.383U ng/Kg 0.164U ng/Kg 0.827U ng/Kg 0.346U ng/Kg	A	B
DX072	SL-065-SA5A-SB-4.0-5.0	2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0167U ng/Kg 0.0354U ng/Kg 0.0749U ng/Kg 0.0232U ng/Kg 0.0211U ng/Kg 0.0303U ng/Kg 0.0752U ng/Kg 0.0214U ng/Kg 0.0432U ng/Kg 0.0653U ng/Kg 0.0650U ng/Kg 0.126U ng/Kg 0.320U ng/Kg 0.0726U ng/Kg 0.952U ng/Kg 0.217U ng/Kg	A	B
DX072	SL-242-SA5A-SB-2.5-3.5	2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDF	0.0138U ng/Kg 0.0269U ng/Kg 0.0501U ng/Kg 0.0273U ng/Kg 0.0546U ng/Kg 0.0538U ng/Kg 0.0600U ng/Kg 0.0259U ng/Kg 0.0489U ng/Kg 0.0838U ng/Kg 0.0581U ng/Kg 0.232U ng/Kg 0.726U ng/Kg 0.0702U ng/Kg 0.728U ng/Kg	A	B
DX072	SL-062-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.188U ng/Kg 0.0401U ng/Kg 0.0803U ng/Kg 0.133U ng/Kg 0.0468U ng/Kg 0.108U ng/Kg 0.141U ng/Kg 0.117U ng/Kg 0.0542U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-067-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.282U ng/Kg 0.0557U ng/Kg 0.138U ng/Kg 0.162U ng/Kg 0.0647U ng/Kg 0.170U ng/Kg 0.125U ng/Kg 0.140U ng/Kg	A	B
DX072	SL-141-SA8N-SS-0.0-0.5	2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.205U ng/Kg 0.0451U ng/Kg 0.0877U ng/Kg 0.121U ng/Kg 0.0676U ng/Kg 0.141U ng/Kg 0.197U ng/Kg 0.118U ng/Kg 0.0749U ng/Kg	A	B
DX072	SL-041-SA5A-SB-4.0-5.0	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0184U ng/Kg 0.0436U ng/Kg 0.0196U ng/Kg 0.0158U ng/Kg 0.0217U ng/Kg 0.0441U ng/Kg 0.0147U ng/Kg 0.0223U ng/Kg 0.0525U ng/Kg 0.0736U ng/Kg 0.0612U ng/Kg 0.215U ng/Kg 0.0429U ng/Kg 0.675U ng/Kg 0.127U ng/Kg	A	B
DX072	SL-044-SA5A-SB-3.0-4.0	2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDF	0.0124U ng/Kg 0.0280U ng/Kg 0.0796U ng/Kg 0.0404U ng/Kg 0.0494U ng/Kg 0.0374U ng/Kg 0.0621U ng/Kg 0.0352U ng/Kg 0.0531U ng/Kg 0.0697U ng/Kg 0.119U ng/Kg 0.142U ng/Kg 0.539U ng/Kg 0.0955U ng/Kg 0.302U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-052-SA5A-SB-4.0-5.0	2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0180U ng/Kg 0.0130U ng/Kg 0.0494U ng/Kg 0.0148U ng/Kg 0.0109U ng/Kg 0.0366U ng/Kg 0.0117U ng/Kg 0.0217U ng/Kg 0.0302U ng/Kg 0.0599U ng/Kg 0.267U ng/Kg 0.0368U ng/Kg 0.654U ng/Kg 0.122U ng/Kg	A	B
DX072	SL-243-SA5A-SB-4.0-5.0	2,3,7,8-TCDF 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0189U ng/Kg 0.0559U ng/Kg 0.0140U ng/Kg 0.00788U ng/Kg 0.0307U ng/Kg 0.0209U ng/Kg 0.0197U ng/Kg 0.0450U ng/Kg 0.0833U ng/Kg 0.266U ng/Kg 0.0223U ng/Kg 1.19U ng/Kg 0.206U ng/Kg	A	B
DX072	SL-094-SA8N-SS-0.0-0.5	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0256U ng/Kg 0.268U ng/Kg 0.184U ng/Kg 0.150U ng/Kg 0.139U ng/Kg 0.135U ng/Kg 0.484U ng/Kg 0.0852U ng/Kg 1.02U ng/Kg	A	B
DX072	SL-095-SA8N-SS-0.0-0.5	2,3,7,8-TCDF 2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.103U ng/Kg 0.0146U ng/Kg 0.170U ng/Kg 0.222U ng/Kg 0.0993U ng/Kg 0.0967U ng/Kg 0.121U ng/Kg 0.0722U ng/Kg 0.339U ng/Kg 0.458U ng/Kg 0.0642U ng/Kg 0.955U ng/Kg	A	B
DX072	SL-096-SA8N-SS-0.0-0.5	2,3,7,8-TCDF 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.106U ng/Kg 0.172U ng/Kg 0.281U ng/Kg 0.0833U ng/Kg 0.113U ng/Kg 0.0704U ng/Kg 0.547U ng/Kg 0.104U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX072	SL-097-SA8N-SS-0.0-0.5	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.213U ng/Kg 0.206U ng/Kg 0.0953U ng/Kg 0.104U ng/Kg 0.114U ng/Kg 0.0670U ng/Kg 0.620U ng/Kg 0.0972U ng/Kg	A	B
DX072	SL-058-SA5A-SB-3.0-4.0	2,3,7,8-TCDD 1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDF	0.0326U ng/Kg 0.0758U ng/Kg 0.0681U ng/Kg 0.0805U ng/Kg 0.0426U ng/Kg 0.0569U ng/Kg 0.0542U ng/Kg 0.0422U ng/Kg 0.146U ng/Kg 0.157U ng/Kg 0.142U ng/Kg 0.726U ng/Kg 0.0704U ng/Kg 0.236U ng/Kg	A	B
DX072	SL-122-SA8N-SS-0.0-0.5	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0549U ng/Kg 0.483U ng/Kg 0.176U ng/Kg 0.315U ng/Kg 0.179U ng/Kg 0.248U ng/Kg 0.132U ng/Kg 0.246U ng/Kg 0.760U ng/Kg 0.191U ng/Kg 1.14U ng/Kg	A	B
DX072	SL-135-SA8N-SS-0.0-0.5	2,3,7,8-TCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,4,7,8-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.113U ng/Kg 0.3514U ng/Kg 0.199U ng/Kg 0.251U ng/Kg 0.151U ng/Kg 0.140U ng/Kg 0.168U ng/Kg 0.251U ng/Kg 1.08U ng/Kg 0.133U ng/Kg	A	B
DX072	DUP14-SA5A-QC-041411	2,3,7,8-TCDD 2,3,4,7,8-PeCDF 1,2,3,4,7,8-HxCDF 1,2,3,6,7,8-HxCDF 2,3,4,6,7,8-HxCDF 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,6,7,8-HpCDD 1,2,3,4,7,8,9-HpCDF OCDD OCDF	0.0705U ng/Kg 0.309U ng/Kg 0.221U ng/Kg 0.193U ng/Kg 0.212U ng/Kg 0.218U ng/Kg 0.267U ng/Kg 0.365U ng/Kg 0.326U ng/Kg 0.278U ng/Kg 0.851U ng/Kg 0.569U ng/Kg	A	B

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG DX072

No Sample Data Qualified in this SDG

LDC #: 25907N21 **VALIDATION COMPLETENESS WORKSHEET** Date: 8/5/11
SDG #: DX072 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 4/14 - 4/19/11
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	20/35%
IV.	Routine calibration ~~ICV~~	A	QC limits
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	A	
VII.	Laboratory control samples	A	LCS
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	A	
X.	Target compound identifications	A	
XI.	Compound quantitation and CRQLs	A	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	SW	D= 1+2
XV.	Field blanks	N	

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: Soil

1 4	DUP14-SA5A-QC-041411	11	SL-052-SA5A-SB-4.0-5.0	21 1	BLK108002	31	
2 5	SL-058-SA5A-SB-3.0-4.0	12	SL-253-SA5A-SB-4.0-5.0 4	22 2	BLK115002	32	
3	SL-059-SA5A-SB-3.0-4.0	13 2	SL-094-SA8N-SS-0.0-0.5	23 3	BLK116001	33	
4	SL-065-SA5A-SB-4.0-5.0	14 2	SL-095-SA8N-SS-0.0-0.5	24 4	BLK116002	34	
5	SL-242-SA5A-SB-2.5-3.5	15 2	SL-096-SA8N-SS-0.0-0.5	25 5	BLK122003	35	
6	SL-062-SA8N-SS-0.0-0.5	16 2	SL-097-SA8N-SS-0.0-0.5	26		36	
7	SL-067-SA8N-SS-0.0-0.5	17 3	SL-122-SA8N-SS-0.0-0.5	27		37	
8	SL-141-SA8N-SS-0.0-0.5	18 3	SL-135-SA8N-SS-0.0-0.5	28		38	
9	SL-041-SA5A-SB-4.0-5.0	19 5	SL-058-SA5A-SB-3.0-4.0MS	29		39	
10	SL-044-SA5A-SB-3.0-4.0	20 5	SL-058-SA5A-SB-3.0-4.0MSD	30		40	

Notes: _____

LDC #: 25907N21

VALIDATION FINDINGS CHECKLIST

Reviewer: K
2nd Reviewer: A

Method: Dioxins/Dibenzofurans (EPA SW 846 Method 1613B)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS Instrument performance check				
Was PFK exact mass 380.9760 verified?	✓			
Were the retention time windows established for all homologues?	✓			
Was the chromatographic resolution between 2,3,7,8-TCDD and peaks representing any other unlabeled TCDD isomers ≤ 25% ?	✓			
Is the static resolving power at least 10,000 (10% valley definition)?	✓			
Was the mass resolution adequately check with PFK?	✓			
Was the presence of 1,2,8,9-TCDD and 1,3,4,6,8-PeCDF verified?	✓			
III. Initial calibration				
Was the initial calibration performed at 5 concentration levels?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20% for unlabeled compounds and ≤ 35% for labeled compounds ?	✓			
Did all calibration standards meet the Ion Abundance Ratio criteria?	✓			
Was the signal to noise ratio for each target compound ≥ 2.5 and for each recovery and internal standard ≥ 10?	✓			
IV. Continuing calibration				
Was a routine calibration performed at the beginning and end of each 12 hour period?	✓			
Were all the concentrations for the unlabeled compounds and labeled compounds within the QC limits (Method 1613B, Table 6)?	✓			
Did all routine calibration standards meet the Ion Abundance Ratio criteria?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank performed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet?	✓			
VI. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			

LDC #: 25907N21

VALIDATION FINDINGS CHECKLIST

Reviewer: JR
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
VIII. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
IX. Internal standards				
Were internal standard recoveries within the 25-150% criteria?	✓			
Was the minimum S/N ratio of all internal standard peaks ≥ 10?	✓			
X. Target compound identification				
For 2,3,7,8 substituted congeners with associated labeled standards, were the retention times of the two quantitation peaks within -1 to 3 sec. of the RT of the labeled standard?	✓			
For 2,3,7,8 substituted congeners without associated labeled standards, were the relative retention times of the two quantitation peaks within 0.005 time units of the RRT measured in the routine calibration?	✓			
For non-2,3,7,8 substituted congeners, were the retention times of the two quantitation peaks within RT established in the performance check solution?	✓			
Did compound spectra contain all characteristic ions listed in the table attached?	✓			
Was the Ion Abundance Ratio for the two quantitation ions within criteria?	X	✓		EMPC
Was the signal to noise ratio for each target compound and labeled standard ≥ 2.5?	✓			
Does the maximum intensity of each specified characteristic ion coincide within ± 2 seconds (includes labeled standards)?	✓			
For PCDF identification, was any signal (S/N ≥ 2.5, at ± seconds RT) detected in the corresponding PCDPE channel?		✓		
Was an acceptable lock mass recorded and monitored?	✓			
XI. Compound quantitation/CRQLs				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.		✓		
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

A. 2,3,7,8-TCDD	F. 1,2,3,4,6,7,8-HpCDD	K. 1,2,3,4,7,8-HxCDF	P. 1,2,3,4,7,8,9-HpCDF	U. Total HpCDD
B. 1,2,3,7,8-PeCDD	G. OCDD	L. 1,2,3,6,7,8-HxCDF	Q. OCDF	V. Total TCDF
C. 1,2,3,4,7,8-HxCDD	H. 2,3,7,8-TCDF	M. 2,3,4,6,7,8-HxCDF	R. Total TCDD	W. Total PeCDF
D. 1,2,3,6,7,8-HxCDD	I. 1,2,3,7,8-PeCDF	N. 1,2,3,7,8,9-HxCDF	S. Total PeCDD	X. Total HxCDF
E. 1,2,3,7,8,9-HxCDD	J. 2,3,4,7,8-PeCDF	O. 1,2,3,4,6,7,8-HpCDF	T. Total HxCDD	Y. Total HpCDF

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were all samples associated with a method blank?
Y N N/A Was a method blank performed for each matrix and whenever a sample extraction was performed?
Y N N/A Was the method blank contaminated?

Blank extraction date: 4/18/11 **Blank analysis date:** 4/23/11
Conc. units: ng/Kg **Associated samples:** 3-12 (UB)

Compound	Blank ID	Sample Identification								
	BLK108002	5x	3	4	5	6	7	8	9	10
H	0.0112*	0.056	0.0304							0.0124*
A	0.0284*	0.142	0.0309	0.0167*	0.0138*					
I	0.0353	0.1765	0.126	0.0354	0.0269				0.0184*	0.0280
J	0.0901*	0.4505	0.145	0.0749	0.0501	0.188	0.282	0.205*	0.0436*	0.0796
B	0.0354	0.177	0.148*	0.0232*	0.0273*	0.0401*	0.0557	0.0451*	0.0196*	0.0404*
K	0.0844	0.422	0.0586*	0.0211*	0.0546*				0.0158*	0.0494
L	0.0439*	0.2195	0.0647	0.0303*	0.0538	0.0803*	0.138*	0.0877	0.0217	0.0374*
M	0.0328*	0.164	0.161*	0.0752*	0.0600*	0.133*	0.162	0.121*	0.0441*	0.0621
C	0.0288*	0.144	0.0476*	0.0214*	0.0259*	0.0468*	0.0647	0.0676*	0.0147*	0.0352
D	0.0367*	0.1835	0.125*	0.0432*	0.0489	0.108		0.141	0.0223	0.0531
E	0.0531*	0.2655	0.298	0.0653	0.0838	0.141	0.170	0.197	0.0525*	0.0697
N	0.0731	0.3655	0.277	0.0650*	0.0581	0.117	0.125	0.118*	0.0736	0.119
O	0.0892	0.446	0.137	0.126	0.232				0.0612	0.142*
F	0.194	0.97	0.383*	0.320	0.726				0.215	0.539*
P	0.0492*	0.246	0.164*	0.0726*	0.0702*	0.0542*	0.140*	0.0749	0.0429*	0.0955
G	0.428	2.14	0.827	0.952					0.675	
Q	0.158	0.79	0.346	0.217*	0.728				0.127*	0.302*

*EMPC

others ND or >5x

VALIDATION FINDINGS WORKSHEET
Blanks

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

cont'd

Compound	Blank ID	Sample Identification								
	BLK108002	5x	11	12						
H	0.0112*	0.056	0.0180*	0.0189						
A	0.0284*	0.142								
I	0.0353	0.1765	0.0130*							
J	0.0901*	0.4505	0.0494	0.0559						
B	0.0354	0.177								
K	0.0844	0.422	0.0148*	0.0140*						
L	0.0439*	0.2195	0.0109*	0.00788*						
M	0.0328*	0.164	0.0366	0.0307*						
C	0.0288*	0.144	0.0117*							
D	0.0367*	0.1835	0.0217	0.0209						
E	0.0531*	0.2655	0.0302	0.0197						
N	0.0731	0.3655		0.0450						
O	0.0892	0.446	0.0599*	0.0883						
F	0.194	0.97	0.267	0.266*						
P	0.0492*	0.246	0.0368*	0.0223*						
G	0.428	2.14	0.654	1.19						
Q	0.158	0.79	0.122	0.206						

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 4/25/11 **Blank analysis date:** 4/28/11
Conc. units: ng/Kg Associated Samples: 13-16 (UB)

Compound	Blank ID	Sample Identification								
	BLK115002	5x	13	14	15	16				
H	0.0227	0.1135		0.103*	0.106					
A	0.0462	0.231	0.0256	0.0146*						
I	0.0538	0.269		0.170*	0.172	0.213				
J	0.0593*	0.2965	0.268	0.222	0.281	0.206				
B	0.0571	0.2855	0.184	0.0993*		0.0953				
K	0.0469	0.2345								
L	0.0401	0.2005	0.150	0.0967	0.0833*	0.104*				
M	0.0651	0.3255	0.139*	0.121	0.113	0.114				
C	0.0421	0.2105	0.135*	0.0722*	0.0704*	0.0670*				
D	0.0348*	0.174								
E	0.0543	0.2715								
N	0.0854	0.427		0.339*						
O	0.126*	0.63	0.484	0.458	0.547	0.620				
F	0.231*	1.155								
P	0.0849*	0.4245	0.0852	0.0642*	0.104	0.0972				
G	0.458	2.29								
Q	0.215	1.075	1.02	0.955						

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: V
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 5/26/11 **Blank analysis date:** 5/58/11
Conc. units: ng/Kg Associated Samples: 2 (UB)

Compound	Blank ID	Sample Identification									
	BLK122003	5x	2								
A	0.0183*	0.0915	0.0326*								
I	0.0563	0.2815	0.0758*								
J	0.0781	0.3905	0.0681*								
B	0.0512	0.256	0.0805*								
K	0.0612	0.306	0.0426								
L	0.0458*	0.229	0.0569								
M	0.0520	0.26	0.0542*								
C	0.0242*	0.121	0.0422								
D	0.0426*	0.213	0.146								
E	0.0398	0.199									
N	0.0821*	0.4105	0.157								
O	0.0881*	0.4405	0.142*								
F	0.173	0.865	0.726								
P	0.0487	0.2435	0.0704*								
G	0.359	1.795									
Q	0.148*	0.74	0.236*								

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: N
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 4/26/11 **Blank analysis date:** 4/28/11
Conc. units: ng/Kg Associated Samples: 17-18 (UB)

Compound	Blank ID	Sample Identification								
	BLK116001	5x	17	18						
H	0.0540*	0.27		0.113						
A	0.0319*	0.1595	0.0549*							
I	0.0631	0.3155								
J	0.117	0.585	0.483	0.3514						
B	0.0569	0.2845	0.176*	0.199						
K	0.0838	0.419	0.315	0.251						
L	0.0727	0.3635	0.179	0.151						
M	0.0953	0.4765	0.248*	0.140*						
C	0.0389*	0.1945	0.132	0.168						
D	0.0462	0.231								
E	0.0481*	0.2405								
N	0.0641	0.3205	0.246	0.251						
O	0.221	1.105	0.760	1.08						
F	0.211*	1.055								
P	0.0916	0.458	0.191	0.133*						
G	0.517	2.585								
Q	0.277*	1.385	1.14							

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Blank extraction date: 4/26/11 **Blank analysis date:** 4/28/11
Conc. units: ng/Kg Associated Samples: 1 (UB)

Compound	Blank ID	Sample Identification									
	BLK116002	5x	1								
H	0.0380*	0.19									
A	0.0262*	0.131	0.0705								
I	0.0555*	0.2775									
J	0.0640*	0.32	0.309								
K	0.0658*	0.329	0.221								
L	0.0601*	0.3005	0.193								
M	0.104	0.52	0.212								
C	0.0285*	0.1425									
D	0.0370*	0.185									
E	0.0614*	0.307	0.218								
N	0.0973*	0.4865	0.267								
O	0.149	0.745	0.365								
F	0.247*	1.235	0.326*								
P	0.0979	0.4895	0.278								
G	0.449	2.245	0.851								
Q	0.273*	1.365	0.569								

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
All contaminants within five times the method blank concentration were qualified as not detected, "U".

LDC:25795N21

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: HRGC/MS Dioxins/dibenzofurans EPA Method 1613B

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Analyte	Concentration (ng/Kg)		RPD ≤50		Qual Parent only
	1	2			
A	0.0705	0.0326*	74		Jdets/A (FD)
B	0.270	0.0805*	108		
C	0.197	0.0422	129		
D	0.256*	0.146	55		
E	0.218	0.257*	16		
F	0.326*	0.726	76		Jdets/A (FD)
G	0.851	12.1	174		
H	0.240*	0.0124U	200		J/UJ/A (FD)
I	0.317*	0.0758*	123		Jdets/A (FD)
J	0.309	0.0681*	128		
K	0.221	0.0426	135		
L	0.193	0.0569	109		
N	0.267	0.157	52		
M	0.212	0.0542*	119		
O	0.365	0.142*	88		
P	0.278	0.0704*	119		
Q	0.569	0.236*	83		

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: SK
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$ — A_x = Area of compound, A_{is} = Area of associated internal standard
average RRF = sum of the RRFs/number of standards — C_x = Concentration of compound, C_{is} = Concentration of internal standard
$\%RSD = 100 * (S/X)$ — S = Standard deviation of the RRFs, X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported RRF (CS3 std)	Recalculated RRF (CS3 std)	Reported %RSD	Recalculated %RSD
1	1CAL	4/12/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	1.022	1.034	1.034	2.87	2.86
	DF17280		2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	1.213	1.200	1.200	6.40	6.41
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	0.974	0.987	0.987	3.75	3.75
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	1.058	1.069	1.069	2.62	2.61
			OCDF (^{13}C-OCDF)	0.946	0.946	0.956	0.956	3.09	3.11
2	1CAL	4/12/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.043	1.043	1.036	1.036	4.08	4.10
	DF17611		2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.167	1.167	1.191	1.191	2.91	2.90
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.971	0.971	1.015	1.015	4.19	4.19
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.069	1.069	1.087	1.087	4.00	4.00
			OCDF (^{13}C-OCDF)	1.016	1.016	1.027	1.027	0.94	0.94
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)						
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)						
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)						
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)						
			OCDF (^{13}C-OCDF)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: 2
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported conc ~~RRF~~ (CC)	Recalculated conc ~~RRF~~ (CC)	Reported %R	Recalculated %R
1	11APR23-02	4/23/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	10.31	10.31	103	103
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.62	9.62	96	96
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	52.08	52.10	104	104
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	51.89	51.89	104	104
			OCDF (^{13}C-OCDF)	0.946	107.10	107.0	107	107
2	11APR23-15	4/23/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	10.22	10.22	102	102
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.59	9.59	96	96
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	51.78	51.80	104	104
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	51.41	51.40	103	103
			OCDF (^{13}C-OCDF)	0.946	106.49	106.43	106	106
3	11APR28-02	4/28/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.93	9.93	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.62	9.61	96	96
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	50.20	50.22	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	50.12	50.11	100	100
			OCDF (^{13}C-OCDF)	0.946	101.86	101.81	102	102

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: K
2nd Reviewer: C

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
RRF = $(A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported ~~RRF~~ Conc (CC)	Recalculated ~~RRF~~ Conc (CC)	Reported %R	Recalculated %R
1	11APR28-15	4/28/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.91	9.91	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.74	9.73	97	97
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	50.22	50.24	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	50.15	50.13	100	100
			OCDF (^{13}C-OCDF)	0.946	101.55	101.50	102	102
2	11APR29-02	4/29/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.94	9.94	99	99
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.51	9.51	95	95
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	50.19	50.20	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	50.23	50.22	100	100
			OCDF (^{13}C-OCDF)	0.946	100.97	100.92	101	101
3	11MAY04-15	5/5/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.022	9.70	9.70	97	97
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.213	9.50	9.50	95	95
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.974	49.53	49.54	99	99
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.058	49.31	49.30	99	99
			OCDF (^{13}C-OCDF)	0.946	98.59	98.54	99	99

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Reviewer: R
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported ~~RRF~~ (CC)	Recalculated ~~RRF~~ (CC)	Reported %R	Recalculated %R
1	11APR27-02	4/27/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.043	9.56	9.51	96	96
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.167	9.69	9.69	97	97
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.971	49.95	49.95	100	100
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.069	48.13	48.14	96	96
			OCDF (^{13}C-OCDF)	1.016	93.08	9304	93	93
2	11APR27-16	4/28/11	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.043	9.20	9.20	92	92
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.167	9.75	9.75	98	98
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.971	48.61	48.62	97	97
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.069	48.29	48.30	97	97
			OCDF (^{13}C-OCDF)	1.016	91.15	91.11	91	91
3			2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)					
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)					
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)					
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)					
			OCDF (^{13}C-OCDF)					

Comments: Refer to Routine Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: SC
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSR - SR)/SA Where: SSR = Spiked sample result, SR = Sample result
SA = Spike added

RPD = I MSR - MSDR I * 2/(MSR + MSDR) MSR = Matrix spike percent recovery MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 19/20

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		Reported RPD	Recalculated RPD
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	----	----
2,3,7,8-TCDD	21.9	21.9	0.0326	21.5	21.6	98	98	98	98	1	0
1,2,3,7,8-PeCDD	110	110	0.0805	111	112	101	101	102	103	1	1
1,2,3,4,7,8-HxCDD	↓	↓	0.0422	113	113	103	103	104	103	1	0
1,2,3,4,7,8,9-HpCDF			0.0704	114	112	104	104	102	102	2	2
OCDF	219	219	0.236	226	223	103	103	102	102	1	1

Comments: Refer to Matrix Spike/Matrix Spike Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907N21

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (EPA Method 1613B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: OPR108002

Compound	Spike Added (ng/kg)		Spiked Sample Concentration (ng/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
2,3,7,8-TCDD	20		19.6		98	98				
1,2,3,7,8-PeCDD	100		105		105	105				
1,2,3,4,7,8-HxCDD	↓		109		109	109				
1,2,3,4,7,8,9-HpCDF	↓		111		111	111				
OCDF	200		223		111	# 111				

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25907A21

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

(Y) N N/A Were all reported results recalculated and verified for all level IV samples?
(Y) N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

RRF = Relative Response Factor (average) from the initial calibration

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

Example:

Sample I.D. 1 , A :

Conc. = $\frac{(634)(2000)(1)}{(1683693)(1.167)(10)(0.914)}$

= 0.0706 ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DX073

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
19-Apr-2011	SL-171-SA5A-SB-2.0-3.0	6262862	N	METHOD	1613B	III
19-Apr-2011	SL-140-SA8N-SS-0.0-0.5	6262860	N	METHOD	1613B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5	6262856	N	METHOD	1613B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MS	6262857	MS	METHOD	1613B	III
19-Apr-2011	SL-138-SA8N-SS-0.0-0.5MSD	6262858	MSD	METHOD	1613B	III
19-Apr-2011	DUP04-SA8N-QC-041911	6262861	FD	METHOD	1613B	III
19-Apr-2011	SL-127-SA5A-SB-2.0-3.0	6262864	N	METHOD	1613B	III
19-Apr-2011	SL-139-SA8N-SS-0.0-0.5	6262859	N	METHOD	1613B	III
19-Apr-2011	EB06-SA8N-SS-041911	6262865	EB	METHOD	1613B	III
19-Apr-2011	SL-126-SA5A-SB-4.0-5.0	6262863	N	METHOD	1613B	III
25-Apr-2011	SL-036-SA8N-SB-4.0-5.0	6268208	N	METHOD	1613B	III
25-Apr-2011	SL-036-SA8N-SB-9.0-10.0	6268209	N	METHOD	1613B	III
26-Apr-2011	SL-027-SA8N-SB-4.0-5.0	6269641	N	METHOD	1613B	III
26-Apr-2011	SL-027-SA8N-SB-9.0-10.0	6269642	N	METHOD	1613B	III
26-Apr-2011	SL-028-SA8N-SB-4.0-5.0	6269643	N	METHOD	1613B	III
26-Apr-2011	SL-028-SA8N-SB-9.0-10.0	6269644	N	METHOD	1613B	III
27-Apr-2011	FB07-SA8N-QC-042711	6270793	FB	METHOD	1613B	III
27-Apr-2011	SL-032-SA8N-SB-4.0-5.0	6270791	N	METHOD	1613B	III
27-Apr-2011	SL-032-SA8N-SB-9.0-10.0	6270792	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB06-SA8N-SS-041911 ***Collected:*** 4/19/2011 12:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.73	JB	0.523	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.22	JB	0.186	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.646	JBQ	0.243	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.713	JB	0.337	MDL	10.1	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.574	JB	0.218	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.437	JBQ	0.351	MDL	10.1	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.451	JB	0.208	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.473	JBQ	0.344	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.588	JB	0.251	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.499	JBQ	0.408	MDL	10.1	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.286	JBQ	0.211	MDL	10.1	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.488	JBQ	0.192	MDL	10.1	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.646	JB	0.201	MDL	10.1	PQL	pg/L	U	B
OCDD	4.69	JB	0.688	MDL	20.1	PQL	pg/L	U	B
OCDF	1.70	JB	0.660	MDL	20.1	PQL	pg/L	U	B

Sample ID: FB07-SA8N-QC-042711 ***Collected:*** 4/27/2011 1:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.87	JBQ	0.284	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.25	JB	0.147	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.498	JBQ	0.173	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.401	JBQ	0.158	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.385	JBQ	0.152	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.423	JBQ	0.229	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.217	JBQ	0.134	MDL	10.6	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.515	JB	0.130	MDL	10.6	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.456	JB	0.127	MDL	10.6	PQL	pg/L	U	B
OCDD	4.47	JB	0.435	MDL	21.3	PQL	pg/L	U	B
OCDF	1.29	JB	0.335	MDL	21.3	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: DUP04-SA8N-QC-041911 ***Collected:*** 4/19/2011 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.27	JB	0.0332	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.682	JB	0.0206	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0801	JBQ	0.0353	MDL	5.43	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.106	JB	0.0421	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.258	JB	0.0285	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.477	JB	0.0428	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.160	JBQ	0.0246	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.549	JB	0.0412	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.263	JBQ	0.0307	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.111	JB	0.0242	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.274	JB	0.0191	MDL	5.43	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.176	JBQ	0.0234	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.464	JB	0.0188	MDL	5.43	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0165	JBQ	0.0151	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.215	JBQ	0.0365	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	0.997	JB	0.0315	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-027-SA8N-SB-4.0-5.0 ***Collected:*** 4/26/2011 10:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.242	JB	0.0178	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0976	JB	0.00962	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.128	JBQ	0.0146	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0454	JB	0.0134	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0712	JB	0.0116	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0482	JBQ	0.0141	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0640	JB	0.0107	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0734	JBQ	0.0131	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.132	JBQ	0.0121	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0774	JBQ	0.0151	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0788	JB	0.00776	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0731	JBQ	0.0109	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0982	JBQ	0.00765	MDL	5.74	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0252	JBQ	0.0152	MDL	1.15	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-027-SA8N-SB-4.0-5.0** ***Collected:*** **4/26/2011 10:54:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.657	JB	0.0256	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.219	JBQ	0.0212	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-027-SA8N-SB-9.0-10.0** ***Collected:*** **4/26/2011 11:01:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	1.27	JB	0.0371	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.0938	JBQ	0.0136	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0526	JBQ	0.0219	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0324	JBQ	0.0155	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0563	JBQ	0.00949	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0515	JB	0.0155	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0373	JB	0.00800	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0566	JB	0.0153	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0479	JB	0.00983	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0567	JB	0.0145	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0589	JB	0.00731	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0336	JBQ	0.00857	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0655	JBQ	0.00766	MDL	5.69	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0188	J	0.0122	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	0.257	JBQ	0.0360	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-028-SA8N-SB-4.0-5.0** ***Collected:*** **4/26/2011 12:19:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.215	JB	0.0169	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0681	JB	0.00776	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0545	JBQ	0.0124	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0362	JBQ	0.0124	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0471	JB	0.00859	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0524	JB	0.0128	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0532	JB	0.00765	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0474	JB	0.0122	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0516	JB	0.00894	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0693	JB	0.0151	MDL	5.80	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-028-SA8N-SB-4.0-5.0 ***Collected:*** 4/26/2011 12:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.0783	JBQ	0.00694	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0549	JB	0.00788	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.105	JBQ	0.00694	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0203	JQ	0.0124	MDL	1.16	PQL	ng/Kg	J	Z
OCDD	0.571	JB	0.0275	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.115	JBQ	0.0279	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-028-SA8N-SB-9.0-10.0 ***Collected:*** 4/26/2011 12:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.259	JBQ	0.0195	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0533	JBQ	0.00779	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0329	JBQ	0.0113	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0223	JBQ	0.0131	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0435	JBQ	0.00801	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0213	JBQ	0.0135	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0249	JBQ	0.00734	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0428	JB	0.0133	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0392	JBQ	0.00823	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0485	JBQ	0.0152	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0599	JBQ	0.00701	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0327	JB	0.00779	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0817	JB	0.00723	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0159	JBQ	0.0152	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0244	J	0.0154	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	1.31	JB	0.0310	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.121	JB	0.0189	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-032-SA8N-SB-4.0-5.0 ***Collected:*** 4/27/2011 3:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.10	JB	0.0399	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.539	JB	0.0209	MDL	5.91	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0983	JB	0.0353	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0873	JBQ	0.0214	MDL	5.91	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-032-SA8N-SB-4.0-5.0 ***Collected:*** 4/27/2011 3:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	0.103	JBQ	0.0200	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.196	JB	0.0223	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0877	JBQ	0.0171	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.114	JBQ	0.0205	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JB	0.0217	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.110	JB	0.0148	MDL	5.91	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.101	JB	0.00806	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.102	JB	0.0188	MDL	5.91	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.111	JB	0.00841	MDL	5.91	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0213	JBQ	0.0152	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0172	JQ	0.0154	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	1.21	JB	0.0390	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-032-SA8N-SB-9.0-10.0 ***Collected:*** 4/27/2011 3:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.37	JB	0.0252	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.164	JB	0.0357	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.149	JB	0.0397	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.161	JB	0.0384	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.487	JB	0.0418	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.185	JB	0.0345	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.243	JB	0.0387	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.142	JB	0.0418	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.217	JBQ	0.0285	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.323	JB	0.0116	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.172	JBQ	0.0361	MDL	5.97	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.265	JB	0.0125	MDL	5.97	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0449	JB	0.0197	MDL	1.19	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0386	JQ	0.0199	MDL	1.19	PQL	ng/Kg	J	Z
OCDF	3.30	JB	0.0353	MDL	11.9	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-036-SA8N-SB-4.0-5.0** ***Collected:*** **4/25/2011 11:14:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.289	JB	0.0234	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.142	JB	0.0146	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0604	JBQ	0.0221	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0454	JBQ	0.0181	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0718	JBQ	0.0133	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.123	JB	0.0185	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0796	JB	0.0122	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.249	JB	0.0176	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.297	JB	0.0153	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.111	JBQ	0.0205	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.177	JB	0.0101	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0532	JB	0.0124	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.124	JB	0.00953	MDL	5.85	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0560	JBQ	0.0189	MDL	1.17	PQL	ng/Kg	U	B
OCDD	1.25	JB	0.0368	MDL	11.7	PQL	ng/Kg	U	B
OCDF	0.172	JBQ	0.0286	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-036-SA8N-SB-9.0-10.0** ***Collected:*** **4/25/2011 11:18:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.291	JB	0.0271	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0910	JB	0.00969	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0222	JBQ	0.0173	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0198	JB	0.0139	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0326	JBQ	0.00894	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0288	JBQ	0.0140	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0457	JB	0.00807	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0335	JBQ	0.0134	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0288	JB	0.0108	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0621	JBQ	0.0158	MDL	6.10	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0641	JBQ	0.00807	MDL	6.10	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0336	JBQ	0.00845	MDL	6.10	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0759	JB	0.00807	MDL	6.10	PQL	ng/Kg	U	B
OCDD	1.41	JB	0.0334	MDL	12.2	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-036-SA8N-SB-9.0-10.0** ***Collected:*** **4/25/2011 11:18:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.194	JB	0.0297	MDL	12.2	PQL	ng/Kg	U	B

Sample ID: **SL-126-SA5A-SB-4.0-5.0** ***Collected:*** **4/19/2011 12:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.440	JBQ	0.0273	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.289	JB	0.0157	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.165	JBQ	0.0220	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.165	JBQ	0.0178	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.218	JB	0.0201	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.169	JB	0.0186	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.214	JB	0.0177	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.171	JB	0.0176	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.192	JB	0.0199	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.279	JB	0.0193	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.327	JB	0.0101	MDL	5.80	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.183	JB	0.0152	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.293	JB	0.00988	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0757	JB	0.0179	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0702	JBQ	0.0136	MDL	1.16	PQL	ng/Kg	U	B
OCDD	2.87	JB	0.0308	MDL	11.6	PQL	ng/Kg	J	Z
OCDF	0.346	JB	0.0276	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-127-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 11:17:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.649	JBQ	0.0464	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.627	JB	0.0720	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.836	JB	0.0535	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.10	JB	0.0755	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.553	JB	0.0488	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.03	JB	0.0700	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.625	JB	0.0540	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.529	JB	0.0255	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.569	JB	0.0148	MDL	5.55	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-127-SA5A-SB-2.0-3.0** *Collected:* **4/19/2011 11:17:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.524	JB	0.0433	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.543	JB	0.0149	MDL	5.55	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.144	JBQ	0.0187	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.158	JB	0.0202	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	10.9	JB	0.0478	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: **SL-138-SA8N-SS-0.0-0.5** *Collected:* **4/19/2011 11:00:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.55	JB	0.0343	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.804	JB	0.0209	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.134	JBQ	0.0329	MDL	5.42	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.117	JB	0.0477	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.225	JB	0.0309	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.490	JBQ	0.0488	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.186	JB	0.0276	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.556	JB	0.0480	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.298	JB	0.0350	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.130	JBQ	0.0234	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.352	JB	0.0202	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.229	JB	0.0273	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.448	JB	0.0184	MDL	5.42	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0464	JBQ	0.0172	MDL	1.08	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.231	JB	0.0390	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	1.29	JB	0.0329	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: **SL-139-SA8N-SS-0.0-0.5** *Collected:* **4/19/2011 11:25:00** *Analysis Type:* **RES** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.17	JB	0.0343	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.666	JBQ	0.0206	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.139	JB	0.0341	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.133	JB	0.0354	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.176	JB	0.0261	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.403	JB	0.0369	MDL	5.22	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-139-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 11:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.155	JB	0.0236	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.544	JB	0.0351	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.276	JB	0.0336	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.137	JB	0.0200	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.236	JB	0.0143	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.190	JB	0.0261	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.286	JB	0.0138	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0236	JBQ	0.0147	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0910	JB	0.0259	MDL	1.04	PQL	ng/Kg	U	B
OCDF	1.16	JB	0.0376	MDL	10.4	PQL	ng/Kg	U	B

Sample ID: **SL-140-SA8N-SS-0.0-0.5** ***Collected:*** **4/19/2011 9:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.753	JB	0.0736	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.49	JB	0.0791	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.06	JB	0.0431	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	5.04	JB	0.0817	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.683	JB	0.0391	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.17	JB	0.0793	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.532	JB	0.0519	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.33	JB	0.148	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.744	JB	0.0331	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.582	JB	0.0410	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.819	JB	0.0332	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.188	JBQ	0.0427	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.393	JB	0.0883	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	11.2	JB	0.0586	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.259	JB	0.0203	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.102	JBQ	0.0113	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0696	JB	0.0162	MDL	5.98	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-171-SA5A-SB-2.0-3.0** ***Collected:*** **4/19/2011 9:42:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,4,7,8-HxCDD	0.0573	JBQ	0.0218	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0614	JBQ	0.0130	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0791	JB	0.0227	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0601	J	0.0118	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.141	JBQ	0.0218	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.131	JBQ	0.0136	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0819	JB	0.0203	MDL	5.98	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0743	JBQ	0.0107	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0658	JB	0.0117	MDL	5.98	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.104	JB	0.0109	MDL	5.98	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0220	JBQ	0.0170	MDL	1.20	PQL	ng/Kg	U	B
OCDD	0.884	JB	0.0318	MDL	12.0	PQL	ng/Kg	U	B
OCDF	0.194	JB	0.0239	MDL	12.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX073

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD	4.37 pg/L	EB06-SA8N-SS-041911
		1,2,3,4,6,7,8-HPCDF	1.81 pg/L	FB07-SA8N-QC-042711
		1,2,3,4,7,8,9-HPCDF	0.983 pg/L	
		1,2,3,4,7,8-HxCDD	0.811 pg/L	
		1,2,3,4,7,8-HXCDF	0.812 pg/L	
		1,2,3,6,7,8-HXCDD	0.674 pg/L	
		1,2,3,6,7,8-HXCDF	0.817 pg/L	
		1,2,3,7,8,9-HXCDD	1.07 pg/L	
		1,2,3,7,8,9-HXCDF	0.969 pg/L	
		1,2,3,7,8-PECDD	0.428 pg/L	
		1,2,3,7,8-PECDF	0.992 pg/L	
		2,3,4,6,7,8-HXCDF	0.470 pg/L	
		2,3,4,7,8-PECDF	0.699 pg/L	
		2,3,7,8-TCDD	0.371 pg/L	
		OCDD	7.09 pg/L	
		OCDF	2.65 pg/L	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB06-SA8N-SS-041911(RES)	1,2,3,4,6,7,8-HPCDD	2.73 pg/L	2.73U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,6,7,8-HPCDF	1.22 pg/L	1.22U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,7,8,9-HPCDF	0.646 pg/L	0.646U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,7,8-HxCDD	0.713 pg/L	0.713U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,4,7,8-HXCDF	0.574 pg/L	0.574U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,6,7,8-HXCDD	0.437 pg/L	0.437U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,6,7,8-HXCDF	0.451 pg/L	0.451U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8,9-HXCDD	0.473 pg/L	0.473U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8,9-HXCDF	0.588 pg/L	0.588U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8-PECDD	0.499 pg/L	0.499U pg/L
EB06-SA8N-SS-041911(RES)	1,2,3,7,8-PECDF	0.286 pg/L	0.286U pg/L
EB06-SA8N-SS-041911(RES)	2,3,4,6,7,8-HXCDF	0.488 pg/L	0.488U pg/L
EB06-SA8N-SS-041911(RES)	2,3,4,7,8-PECDF	0.646 pg/L	0.646U pg/L
EB06-SA8N-SS-041911(RES)	OCDD	4.69 pg/L	4.69U pg/L
EB06-SA8N-SS-041911(RES)	OCDF	1.70 pg/L	1.70U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,6,7,8-HPCDD	1.87 pg/L	1.87U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,6,7,8-HPCDF	1.25 pg/L	1.25U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,7,8,9-HPCDF	0.498 pg/L	0.498U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,4,7,8-HXCDF	0.401 pg/L	0.401U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,6,7,8-HXCDF	0.385 pg/L	0.385U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,7,8,9-HXCDD	0.423 pg/L	0.423U pg/L
FB07-SA8N-QC-042711(RES)	1,2,3,7,8-PECDF	0.217 pg/L	0.217U pg/L
FB07-SA8N-QC-042711(RES)	2,3,4,6,7,8-HXCDF	0.515 pg/L	0.515U pg/L
FB07-SA8N-QC-042711(RES)	2,3,4,7,8-PECDF	0.456 pg/L	0.456U pg/L
FB07-SA8N-QC-042711(RES)	OCDD	4.47 pg/L	4.47U pg/L
FB07-SA8N-QC-042711(RES)	OCDF	1.29 pg/L	1.29U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1170B371237	4/29/2011 12:37:00 PM	1,2,3,4,6,7,8-HPCDD	0.222 ng/Kg	DUP04-SA8N-QC-041911
		1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	SL-036-SA8N-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.108 ng/Kg	SL-036-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0460 ng/Kg	SL-126-SA5A-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0592 ng/Kg	SL-127-SA5A-SB-2.0-3.0
		1,2,3,6,7,8-HXCDD	0.0426 ng/Kg	SL-138-SA8N-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0417 ng/Kg	SL-139-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0546 ng/Kg	SL-140-SA8N-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0964 ng/Kg	
		1,2,3,7,8-PECDD	0.0524 ng/Kg	
		1,2,3,7,8-PECDF	0.0492 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0597 ng/Kg	
		2,3,4,7,8-PECDF	0.0795 ng/Kg	
		2,3,7,8-TCDD	0.0430 ng/Kg	
		2,3,7,8-TCDF	0.0189 ng/Kg	
		OCDD	0.573 ng/Kg	
		OCDF	0.266 ng/Kg	
BLK1220B370705	5/5/2011 7:05:00 AM	1,2,3,4,6,7,8-HPCDD	0.173 ng/Kg	SL-027-SA8N-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.0881 ng/Kg	SL-027-SA8N-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.0487 ng/Kg	SL-028-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0242 ng/Kg	SL-028-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HXCDF	0.0612 ng/Kg	SL-032-SA8N-SB-4.0-5.0
		1,2,3,6,7,8-HXCDD	0.0426 ng/Kg	SL-032-SA8N-SB-9.0-10.0
		1,2,3,6,7,8-HXCDF	0.0458 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0398 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0821 ng/Kg	
		1,2,3,7,8-PECDD	0.0512 ng/Kg	
		1,2,3,7,8-PECDF	0.0563 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0520 ng/Kg	
		2,3,4,7,8-PECDF	0.0781 ng/Kg	
		2,3,7,8-TCDD	0.0183 ng/Kg	
		OCDD	0.359 ng/Kg	
		OCDF	0.148 ng/Kg	
BLK1220B371838	5/4/2011 6:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.160 ng/Kg	SL-171-SA5A-SB-2.0-3.0
		1,2,3,4,6,7,8-HPCDF	0.0552 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.0327 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0176 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0299 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0563 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0395 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0587 ng/Kg	
		1,2,3,7,8-PECDD	0.0291 ng/Kg	
		1,2,3,7,8-PECDF	0.0402 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0330 ng/Kg	
		2,3,4,7,8-PECDF	0.0477 ng/Kg	
		2,3,7,8-TCDF	0.0138 ng/Kg	
		OCDD	0.283 ng/Kg	
		OCDF	0.0855 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA8N-QC-041911(RES)	1,2,3,4,6,7,8-HPCDF	0.682 ng/Kg	0.682U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,4,7,8,9-HPCDF	0.0801 ng/Kg	0.0801U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,4,7,8-HxCDD	0.106 ng/Kg	0.106U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,4,7,8-HXCDF	0.258 ng/Kg	0.258U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,6,7,8-HXCDF	0.160 ng/Kg	0.160U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,7,8,9-HXCDF	0.263 ng/Kg	0.263U ng/Kg
DUP04-SA8N-QC-041911(RES)	1,2,3,7,8-PECDD	0.111 ng/Kg	0.111U ng/Kg
DUP04-SA8N-QC-041911(RES)	2,3,4,6,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
DUP04-SA8N-QC-041911(RES)	2,3,7,8-TCDD	0.0165 ng/Kg	0.0165U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP04-SA8N-QC-041911(RES)	OCDF	0.997 ng/Kg	0.997U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.242 ng/Kg	0.242U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0976 ng/Kg	0.0976U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.128 ng/Kg	0.128U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0712 ng/Kg	0.0712U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0482 ng/Kg	0.0482U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0640 ng/Kg	0.0640U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0734 ng/Kg	0.0734U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0774 ng/Kg	0.0774U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0788 ng/Kg	0.0788U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0731 ng/Kg	0.0731U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0982 ng/Kg	0.0982U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0252 ng/Kg	0.0252U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	OCDD	0.657 ng/Kg	0.657U ng/Kg
SL-027-SA8N-SB-4.0-5.0(RES)	OCDF	0.219 ng/Kg	0.219U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0938 ng/Kg	0.0938U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0526 ng/Kg	0.0526U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0324 ng/Kg	0.0324U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0563 ng/Kg	0.0563U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0515 ng/Kg	0.0515U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0373 ng/Kg	0.0373U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0566 ng/Kg	0.0566U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0479 ng/Kg	0.0479U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0567 ng/Kg	0.0567U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0589 ng/Kg	0.0589U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0655 ng/Kg	0.0655U ng/Kg
SL-027-SA8N-SB-9.0-10.0(RES)	OCDF	0.257 ng/Kg	0.257U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.215 ng/Kg	0.215U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0545 ng/Kg	0.0545U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0362 ng/Kg	0.0362U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0471 ng/Kg	0.0471U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0524 ng/Kg	0.0524U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0532 ng/Kg	0.0532U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0474 ng/Kg	0.0474U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0516 ng/Kg	0.0516U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0693 ng/Kg	0.0693U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-028-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0783 ng/Kg	0.0783U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0549 ng/Kg	0.0549U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.105 ng/Kg	0.105U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	OCDD	0.571 ng/Kg	0.571U ng/Kg
SL-028-SA8N-SB-4.0-5.0(RES)	OCDF	0.115 ng/Kg	0.115U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.259 ng/Kg	0.259U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0533 ng/Kg	0.0533U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0223 ng/Kg	0.0223U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0435 ng/Kg	0.0435U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0213 ng/Kg	0.0213U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0249 ng/Kg	0.0249U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0428 ng/Kg	0.0428U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0392 ng/Kg	0.0392U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0485 ng/Kg	0.0485U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0599 ng/Kg	0.0599U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0327 ng/Kg	0.0327U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0817 ng/Kg	0.0817U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0159 ng/Kg	0.0159U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	OCDD	1.31 ng/Kg	1.31U ng/Kg
SL-028-SA8N-SB-9.0-10.0(RES)	OCDF	0.121 ng/Kg	0.121U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0983 ng/Kg	0.0983U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0873 ng/Kg	0.0873U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.196 ng/Kg	0.196U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0877 ng/Kg	0.0877U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.114 ng/Kg	0.114U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.110 ng/Kg	0.110U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.101 ng/Kg	0.101U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.102 ng/Kg	0.102U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.111 ng/Kg	0.111U ng/Kg
SL-032-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0213 ng/Kg	0.0213U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.185 ng/Kg	0.185U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.142 ng/Kg	0.142U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.217 ng/Kg	0.217U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-032-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.265 ng/Kg	0.265U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-032-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0449 ng/Kg	0.0449U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.289 ng/Kg	0.289U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0604 ng/Kg	0.0604U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0718 ng/Kg	0.0718U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.123 ng/Kg	0.123U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0796 ng/Kg	0.0796U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.249 ng/Kg	0.249U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.297 ng/Kg	0.297U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.111 ng/Kg	0.111U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.177 ng/Kg	0.177U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0532 ng/Kg	0.0532U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0560 ng/Kg	0.0560U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	OCDD	1.25 ng/Kg	1.25U ng/Kg
SL-036-SA8N-SB-4.0-5.0(RES)	OCDF	0.172 ng/Kg	0.172U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.291 ng/Kg	0.291U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0222 ng/Kg	0.0222U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0198 ng/Kg	0.0198U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0326 ng/Kg	0.0326U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0288 ng/Kg	0.0288U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0457 ng/Kg	0.0457U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0335 ng/Kg	0.0335U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0288 ng/Kg	0.0288U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0621 ng/Kg	0.0621U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0641 ng/Kg	0.0641U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0336 ng/Kg	0.0336U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0759 ng/Kg	0.0759U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	OCDD	1.41 ng/Kg	1.41U ng/Kg
SL-036-SA8N-SB-9.0-10.0(RES)	OCDF	0.194 ng/Kg	0.194U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.440 ng/Kg	0.440U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.289 ng/Kg	0.289U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.165 ng/Kg	0.165U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.165 ng/Kg	0.165U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.218 ng/Kg	0.218U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.169 ng/Kg	0.169U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.171 ng/Kg	0.171U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.192 ng/Kg	0.192U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.183 ng/Kg	0.183U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.293 ng/Kg	0.293U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0757 ng/Kg	0.0757U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-126-SA5A-SB-4.0-5.0(RES)	OCDF	0.346 ng/Kg	0.346U ng/Kg
SL-127-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDD	0.144 ng/Kg	0.144U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.134 ng/Kg	0.134U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.117 ng/Kg	0.117U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.225 ng/Kg	0.225U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.186 ng/Kg	0.186U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.298 ng/Kg	0.298U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.130 ng/Kg	0.130U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.229 ng/Kg	0.229U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0464 ng/Kg	0.0464U ng/Kg
SL-138-SA8N-SS-0.0-0.5(RES)	OCDF	1.29 ng/Kg	1.29U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.666 ng/Kg	0.666U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.139 ng/Kg	0.139U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.133 ng/Kg	0.133U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.276 ng/Kg	0.276U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.137 ng/Kg	0.137U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.236 ng/Kg	0.236U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.190 ng/Kg	0.190U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.286 ng/Kg	0.286U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0236 ng/Kg	0.0236U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0910 ng/Kg	0.0910U ng/Kg
SL-139-SA8N-SS-0.0-0.5(RES)	OCDF	1.16 ng/Kg	1.16U ng/Kg
SL-140-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.188 ng/Kg	0.188U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDD	0.259 ng/Kg	0.259U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,6,7,8-HPCDF	0.102 ng/Kg	0.102U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0696 ng/Kg	0.0696U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HxCDD	0.0573 ng/Kg	0.0573U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,4,7,8-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,6,7,8-HXCDD	0.0791 ng/Kg	0.0791U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8,9-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDD	0.0819 ng/Kg	0.0819U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	1,2,3,7,8-PECDF	0.0743 ng/Kg	0.0743U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	2,3,4,6,7,8-HXCDF	0.0658 ng/Kg	0.0658U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-171-SA5A-SB-2.0-3.0(RES)	2,3,4,7,8-PECDF	0.104 ng/Kg	0.104U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	2,3,7,8-TCDF	0.0220 ng/Kg	0.0220U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	OCDD	0.884 ng/Kg	0.884U ng/Kg
SL-171-SA5A-SB-2.0-3.0(RES)	OCDF	0.194 ng/Kg	0.194U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: PrepDX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
MOISTURE	8.2	8.7	6		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-138-SA8N-SS-0.0-0.5	DUP04-SA8N-QC-041911			
1,2,3,4,6,7,8-HPCDD	3.55	3.27	8	50.00	
1,2,3,4,6,7,8-HPCDF	0.804	0.682	16	50.00	
1,2,3,4,7,8-HxCDD	0.117	0.106	10	50.00	
1,2,3,4,7,8-HXCDF	0.225	0.258	14	50.00	
1,2,3,6,7,8-HXCDD	0.490	0.477	3	50.00	
1,2,3,6,7,8-HXCDF	0.186	0.160	15	50.00	
1,2,3,7,8,9-HXCDD	0.556	0.549	1	50.00	
1,2,3,7,8,9-HXCDF	0.298	0.263	12	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	0.130	0.111	16	50.00	
1,2,3,7,8-PECDF	0.352	0.274	25	50.00	
2,3,4,6,7,8-HXCDF	0.229	0.176	26	50.00	
2,3,4,7,8-PECDF	0.448	0.464	4	50.00	
2,3,7,8-TCDF	0.231	0.215	7	50.00	
OCDD	28.5	24.5	15	50.00	
OCDF	1.29	0.997	26	50.00	
1,2,3,4,7,8,9-HPCDF	0.134	0.0801	50	50.00	J(all detects)
2,3,7,8-TCDD	0.0464	0.0165	95	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB06-SA8N-SS-041911	1,2,3,4,6,7,8-HPCDD	JB	2.73	10.1	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	1.22	10.1	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.646	10.1	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JB	0.713	10.1	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	0.574	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.437	10.1	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.451	10.1	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.473	10.1	PQL	pg/L	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.588	10.1	PQL	pg/L	
	1,2,3,7,8-PECDD	JBQ	0.499	10.1	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.286	10.1	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.488	10.1	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.646	10.1	PQL	pg/L	
	OCDD	JB	4.69	20.1	PQL	pg/L	
	OCDF	JB	1.70	20.1	PQL	pg/L	
FB07-SA8N-QC-042711	1,2,3,4,6,7,8-HPCDD	JBQ	1.87	10.6	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	1.25	10.6	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.498	10.6	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.401	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.385	10.6	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.423	10.6	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.217	10.6	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	0.515	10.6	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.456	10.6	PQL	pg/L	
	OCDD	JB	4.47	21.3	PQL	pg/L	
	OCDF	JB	1.29	21.3	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA8N-QC-041911	1,2,3,4,6,7,8-HPCDD	JB	3.27	5.43	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.682	5.43	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0801	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.106	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.258	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.477	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.160	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.549	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.263	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.111	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.274	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.176	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.464	5.43	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0165	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.215	1.09	PQL	ng/Kg	
	OCDF	JB	0.997	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-027-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.242	5.74	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0976	5.74	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.128	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0454	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0712	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0482	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0640	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0734	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.132	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0774	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0788	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0731	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0982	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0252	1.15	PQL	ng/Kg	
	OCDD	JB	0.657	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.219	11.5	PQL	ng/Kg	
SL-027-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.27	5.69	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0938	5.69	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0526	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0324	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0563	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0515	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0373	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0566	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0479	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0567	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0589	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0336	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0655	5.69	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0188	1.14	PQL	ng/Kg	
	OCDF	JBQ	0.257	11.4	PQL	ng/Kg	
SL-028-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.215	5.80	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0681	5.80	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0545	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0362	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0471	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0524	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0532	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0474	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0516	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0693	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0783	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0549	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.105	5.80	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0203	1.16	PQL	ng/Kg	
	OCDD	JB	0.571	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.115	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-028-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.259	5.51	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0533	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0329	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0223	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0435	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0213	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0249	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0428	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0392	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0485	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0599	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0327	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0817	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0159	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0244	1.10	PQL	ng/Kg	
	OCDD	JB	1.31	11.0	PQL	ng/Kg	
	OCDF	JB	0.121	11.0	PQL	ng/Kg	
SL-032-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	3.10	5.91	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.539	5.91	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0983	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0873	5.91	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.103	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.196	5.91	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0877	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.114	5.91	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.112	5.91	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.110	5.91	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.101	5.91	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.102	5.91	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.111	5.91	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0213	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0172	1.18	PQL	ng/Kg	
	OCDF	JB	1.21	11.8	PQL	ng/Kg	
SL-032-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.37	5.97	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.164	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.149	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.161	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.487	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.185	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.243	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.142	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.217	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.323	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.172	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.265	5.97	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0449	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0386	1.19	PQL	ng/Kg	
	OCDF	JB	3.30	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.289	5.85	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.142	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0604	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0454	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0718	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.123	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0796	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.249	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.297	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.111	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.177	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0532	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.124	5.85	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0560	1.17	PQL	ng/Kg	
	OCDD	JB	1.25	11.7	PQL	ng/Kg	
	OCDF	JBQ	0.172	11.7	PQL	ng/Kg	
SL-036-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.291	6.10	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0910	6.10	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0222	6.10	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0198	6.10	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0326	6.10	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0288	6.10	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0457	6.10	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0335	6.10	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0288	6.10	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0621	6.10	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0641	6.10	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0336	6.10	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0759	6.10	PQL	ng/Kg	
	OCDD	JB	1.41	12.2	PQL	ng/Kg	
	OCDF	JB	0.194	12.2	PQL	ng/Kg	
SL-126-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.440	5.80	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.289	5.80	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.165	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.165	5.80	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.218	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.169	5.80	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.214	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.171	5.80	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.192	5.80	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.279	5.80	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.327	5.80	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.183	5.80	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.293	5.80	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0757	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0702	1.16	PQL	ng/Kg	
	OCDD	JB	2.87	11.6	PQL	ng/Kg	
	OCDF	JB	0.346	11.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA5A-SB-2.0-3.0	1,2,3,4,7,8,9-HPCDF	JBQ	0.649	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.627	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.836	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.10	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.553	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.03	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.625	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.529	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.569	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.524	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.543	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.144	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.158	1.11	PQL	ng/Kg	
	OCDF	JB	10.9	11.1	PQL	ng/Kg	
SL-138-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.55	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.804	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.134	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.117	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.225	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.490	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.186	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.556	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.298	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.130	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.352	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.229	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.448	5.42	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0464	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.231	1.08	PQL	ng/Kg	
	OCDF	JB	1.29	10.8	PQL	ng/Kg	
SL-139-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.17	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.666	5.22	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.139	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.133	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.176	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.403	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.155	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.544	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.276	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.137	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.236	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.190	5.22	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.286	5.22	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0236	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0910	1.04	PQL	ng/Kg	
	OCDF	JB	1.16	10.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX073 **Laboratory: LL**

EDD Filename: DX073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-140-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.753	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	4.49	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.06	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	5.04	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.683	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.17	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.532	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.33	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.744	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.582	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.819	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.188	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.393	1.14	PQL	ng/Kg	
	OCDF	JB	11.2	11.4	PQL	ng/Kg	
SL-171-SA5A-SB-2.0-3.0	1,2,3,4,6,7,8-HPCDD	JB	0.259	5.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.102	5.98	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0696	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0573	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0614	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0791	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.0601	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.141	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.131	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0819	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0743	5.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0658	5.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.104	5.98	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0220	1.20	PQL	ng/Kg	
	OCDD	JB	0.884	12.0	PQL	ng/Kg	
	OCDF	JB	0.194	12.0	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX074

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Apr-2011	SL-129-SA8N-SS-0.0-0.5	6264839	N	METHOD	1613B	III
20-Apr-2011	SL-128-SA8N-SS-0.0-0.5	6264838	N	METHOD	1613B	III
20-Apr-2011	SL-127-SA8N-SS-0.0-0.5	6264837	N	METHOD	1613B	III
20-Apr-2011	SL-136-SA8N-SS-0.0-0.5	6264840	N	METHOD	1613B	III
20-Apr-2011	SL-120-SA8N-SS-0.0-0.5	6264834	N	METHOD	1613B	III
20-Apr-2011	SL-120-SA8N-SS-0.0-0.5MS	6264835	MS	METHOD	1613B	III
20-Apr-2011	SL-120-SA8N-SS-0.0-0.5MSD	6264836	MSD	METHOD	1613B	III
20-Apr-2011	DUP05-SA8N-QC-042011	6264842	FD	METHOD	1613B	III
20-Apr-2011	SL-137-SA8N-SS-0.0-0.5	6264841	N	METHOD	1613B	III
20-Apr-2011	EB07-SA8N-SS-042011	6264843	EB	METHOD	1613B	III
20-Apr-2011	SL-098-SA8N-SS-0.0-0.5	6264830	N	METHOD	1613B	III
20-Apr-2011	SL-101-SA8N-SS-0.0-0.5	6264831	N	METHOD	1613B	III
20-Apr-2011	SL-102-SA8N-SS-0.0-0.5	6264832	N	METHOD	1613B	III
20-Apr-2011	SL-108-SA8N-SS-0.0-0.5	6264833	N	METHOD	1613B	III
28-Apr-2011	SL-041-SA8N-SB-4.0-5.0	6271870	N	METHOD	1613B	III
28-Apr-2011	SL-041-SA8N-SB-9.0-10.0	6271871	N	METHOD	1613B	III
28-Apr-2011	EB05-SA8N-SB-042811	6271872	EB	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB05-SA8N-SB-042811 *Collected:* 4/28/2011 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	2.21	JB	0.336	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	1.03	JB	0.151	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.416	JB	0.183	MDL	10.6	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.215	JBQ	0.142	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.530	JBQ	0.277	MDL	10.6	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.489	JB	0.136	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.400	JB	0.252	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.432	JBQ	0.150	MDL	10.6	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.331	JBQ	0.149	MDL	10.6	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	0.361	JBQ	0.126	MDL	10.6	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.763	JB	0.143	MDL	10.6	PQL	pg/L	U	B
OCDD	5.10	JB	0.440	MDL	21.1	PQL	pg/L	U	B
OCDF	1.28	JB	0.428	MDL	21.1	PQL	pg/L	U	B

Sample ID: EB07-SA8N-SS-042011 *Collected:* 4/20/2011 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.42	JB	0.461	MDL	9.76	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	4.52	JBQ	0.262	MDL	9.76	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	1.12	JB	0.311	MDL	9.76	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	1.13	JB	0.202	MDL	9.76	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.328	JBQ	0.274	MDL	9.76	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.755	JBQ	0.196	MDL	9.76	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.478	JBQ	0.264	MDL	9.76	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.596	JQ	0.203	MDL	9.76	PQL	pg/L	J	Z
1,2,3,7,8-PECDD	0.389	JQ	0.238	MDL	9.76	PQL	pg/L	J	Z
1,2,3,7,8-PECDF	0.410	JBQ	0.146	MDL	9.76	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.70	JB	0.192	MDL	9.76	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.612	JBQ	0.132	MDL	9.76	PQL	pg/L	U	B
OCDD	6.51	JBQ	0.475	MDL	19.5	PQL	pg/L	U	B
OCDF	3.03	JB	0.576	MDL	19.5	PQL	pg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP05-SA8N-QC-042011 ***Collected:*** 4/20/2011 10:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	338	B	0.197	MDL	5.36	PQL	ng/Kg	J	FD
1,2,3,4,7,8,9-HPCDF	1.83	JB	0.0797	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.939	JB	0.148	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.62	JB	0.0939	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.29	J	0.0897	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.88	JB	0.147	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.876	JB	0.0896	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.769	JB	0.0672	MDL	5.36	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	4.85	JB	0.0922	MDL	5.36	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	1.28	JB	0.0861	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.78	JB	0.0907	MDL	5.36	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0542	J	0.0192	MDL	1.07	PQL	ng/Kg	J	Z
OCDD	3760	B	0.192	MDL	10.7	PQL	ng/Kg	J	FD

Sample ID: SL-041-SA8N-SB-4.0-5.0 ***Collected:*** 4/28/2011 12:09:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.310	JBQ	0.0174	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0965	JBQ	0.00707	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0533	JB	0.0125	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0702	JBQ	0.0171	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0817	JB	0.0132	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.115	JB	0.0172	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0628	JBQ	0.0112	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.272	JB	0.0161	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.302	JBQ	0.0141	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0847	JB	0.0163	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0924	JB	0.00718	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0595	JB	0.0117	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0988	JBQ	0.00742	MDL	5.89	PQL	ng/Kg	U	B
OCDD	1.05	JB	0.0266	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.151	JBQ	0.0221	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-041-SA8N-SB-9.0-10.0 ***Collected:*** 4/28/2011 12:19:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.226	JB	0.0203	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0745	JB	0.00736	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0431	JB	0.0132	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0569	JBQ	0.0151	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0607	JBQ	0.0102	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0467	JBQ	0.0159	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0554	JBQ	0.00876	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0609	JBQ	0.0147	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0625	JBQ	0.0109	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0944	JBQ	0.0172	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0978	JB	0.00876	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0426	JBQ	0.00888	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.103	JB	0.00911	MDL	5.75	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0291	JBQ	0.0162	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0267	JQ	0.0141	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.662	JB	0.0249	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.134	JB	0.0223	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-098-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 12:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	4.66	JB	0.0224	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.993	JB	0.00881	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.128	JB	0.0159	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.118	JB	0.0168	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.315	JB	0.0121	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.469	JB	0.0180	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.180	JB	0.0109	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.493	JB	0.0168	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.443	J	0.0150	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.185	JB	0.0214	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.251	JBQ	0.0139	MDL	6.02	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.183	JB	0.0118	MDL	6.02	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.286	JB	0.0144	MDL	6.02	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-098-SA8N-SS-0.0-0.5 *Collected:* 4/20/2011 12:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0429	JQ	0.0168	MDL	1.20	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.177	JB	0.0277	MDL	1.20	PQL	ng/Kg	J	Z
OCDF	2.41	JB	0.0224	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: SL-101-SA8N-SS-0.0-0.5 *Collected:* 4/20/2011 1:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.20	JB	0.0137	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.241	JB	0.0200	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.344	JB	0.0194	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.20	JB	0.0228	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.874	JB	0.0200	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.465	JB	0.0196	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.811	JB	0.0189	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.453	J	0.0217	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.394	JB	0.0267	MDL	5.83	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.598	JB	0.0224	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.570	JB	0.0175	MDL	5.83	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.42	JB	0.0232	MDL	5.83	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0848	JQ	0.0201	MDL	1.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.849	JB	0.0524	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	5.66	JB	0.0252	MDL	11.7	PQL	ng/Kg	J	Z

Sample ID: SL-102-SA8N-SS-0.0-0.5 *Collected:* 4/20/2011 1:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.38	JB	0.0149	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.179	JB	0.0166	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.215	JB	0.0220	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.790	JB	0.0289	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.588	JB	0.0220	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.217	JB	0.0255	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.552	JB	0.0191	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.334	J	0.0191	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.197	JB	0.0240	MDL	5.72	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-102-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 1:30:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.362	JB	0.0181	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.246	JB	0.0152	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.656	JB	0.0190	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0521	J	0.0167	MDL	1.14	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.679	JB	0.0502	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	2.89	JB	0.0213	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-108-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 1:50:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.32	JBQ	0.130	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.32	JB	0.0468	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.06	JB	0.0371	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.24	JB	0.0344	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.647	J	0.0280	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.68	JB	0.0460	MDL	5.00	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.700	JB	0.0320	MDL	5.00	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.80	JB	0.0255	MDL	5.00	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.04	JB	0.0312	MDL	5.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.287	JQ	0.0369	MDL	1.00	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.782	JB	0.0675	MDL	1.00	PQL	ng/Kg	J	Z

Sample ID: SL-120-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	166	B	0.130	MDL	5.28	PQL	ng/Kg	J	Q, FD
1,2,3,4,7,8,9-HPCDF	1.51	JBQ	0.103	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.02	JB	0.0527	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.27	JB	0.0565	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.88	JB	0.0573	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.970	JB	0.0523	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.05	JB	0.0526	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.689	J	0.0422	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.395	JBQ	0.0530	MDL	5.28	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.883	JB	0.0397	MDL	5.28	PQL	ng/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-120-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 10:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.948	JB	0.0365	MDL	5.28	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.59	JB	0.0411	MDL	5.28	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0445	J	0.0261	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.453	JB	0.117	MDL	1.06	PQL	ng/Kg	J	Z
OCDD	2070	B	0.101	MDL	10.6	PQL	ng/Kg	J	FD

Sample ID: SL-127-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 9:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.59	JB	0.0511	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.402	JB	0.0771	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.526	JB	0.0372	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.767	JB	0.0265	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.39	JB	0.0386	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.581	JB	0.0251	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.42	JB	0.0378	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.563	J	0.0308	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.549	JB	0.0428	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.28	JB	0.0298	MDL	5.34	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.495	JB	0.0267	MDL	5.34	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.03	JB	0.0313	MDL	5.34	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.135	JQ	0.0258	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.645	JB	0.0667	MDL	1.07	PQL	ng/Kg	J	Z
OCDF	6.16	JB	0.0494	MDL	10.7	PQL	ng/Kg	J	Z

Sample ID: SL-128-SA8N-SS-0.0-0.5 ***Collected:*** 4/20/2011 8:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.60	JB	0.0258	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.246	JB	0.0328	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.310	JBQ	0.0446	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.539	JB	0.0365	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.04	JB	0.0450	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.226	JQ	0.0338	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.02	JB	0.0448	MDL	5.99	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-128-SA8N-SS-0.0-0.5** ***Collected:*** **4/20/2011 8:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.433	JB	0.0370	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.221	JB	0.0315	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.434	JB	0.0286	MDL	5.99	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.248	JB	0.0322	MDL	5.99	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.672	JB	0.0275	MDL	5.99	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0339	JQ	0.0171	MDL	1.20	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.346	JB	0.0720	MDL	1.20	PQL	ng/Kg	J	Z
OCDF	6.06	JB	0.0225	MDL	12.0	PQL	ng/Kg	J	Z

Sample ID: **SL-129-SA8N-SS-0.0-0.5** ***Collected:*** **4/20/2011 8:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.54	JB	0.0297	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.150	JBQ	0.0392	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0936	JB	0.0363	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.72	JB	0.0532	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.401	JB	0.0373	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.847	J	0.0506	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.465	JB	0.0350	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.376	JB	0.0569	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.116	JBQ	0.0352	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.17	JB	0.0452	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.485	JB	0.0498	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.09	JB	0.0456	MDL	5.37	PQL	ng/Kg	J	Z
OCDF	1.52	JB	0.0372	MDL	10.7	PQL	ng/Kg	J	Z

Sample ID: **SL-136-SA8N-SS-0.0-0.5** ***Collected:*** **4/20/2011 9:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.06	JB	0.0159	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.162	JBQ	0.0141	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.106	JB	0.0193	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.472	JB	0.0323	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.411	JBQ	0.0214	MDL	5.97	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-136-SA8N-SS-0.0-0.5** ***Collected:*** **4/20/2011 9:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDF	0.222	JBQ	0.0266	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.341	JBQ	0.0180	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.191	J	0.0157	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.107	JBQ	0.0194	MDL	5.97	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.146	JBQ	0.0103	MDL	5.97	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.231	JB	0.0123	MDL	5.97	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.243	JB	0.0116	MDL	5.97	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0161	JQ	0.0127	MDL	1.19	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.120	JBQ	0.0218	MDL	1.19	PQL	ng/Kg	U	B
OCDF	2.14	JB	0.0198	MDL	11.9	PQL	ng/Kg	J	Z

Sample ID: **SL-137-SA8N-SS-0.0-0.5** ***Collected:*** **4/20/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.702	JB	0.0295	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.489	JBQ	0.0325	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.26	JB	0.0440	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.52	JB	0.0353	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.808	JB	0.0403	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.19	JB	0.0308	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.284	J	0.0233	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.398	JB	0.0294	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.487	JB	0.0277	MDL	5.17	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.02	JB	0.0197	MDL	5.17	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.50	JB	0.0281	MDL	5.17	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0807	JQ	0.0223	MDL	1.03	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.925	JB	0.0756	MDL	1.03	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

II. GC/MS Instrument Performance Check

Instrument performance was checked at 12 hour intervals.

All ion abundance requirements were met.

III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 15.0% for each individual compound and less than or equal to 30.0% for calibration check compounds (CCCs).

In the case where the laboratory used a calibration curve to evaluate the compounds, all coefficients of determination (r^2) were greater than or equal to 0.990 .

All of the continuing calibration relative response factors (RRF) were within method and validation criteria with the following exceptions:

Date	Compound	RRF (Limits)	Associated Samples	Flag	A or P
6/6/11	Acetone	0.027640 (≥0.05)	All samples in SDG MFB-057	L (all detects) R (all non-detects)	A

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% for all compounds.

All of the continuing calibration relative response factors (RRF) were within method and validation criteria with the following exceptions:

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX074

Method Blank Outlier Report

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B371437	5/4/2011 2:37:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD OCDD OCDF	4.37 pg/L 1.81 pg/L 0.983 pg/L 0.811 pg/L 0.812 pg/L 0.674 pg/L 0.817 pg/L 1.07 pg/L 0.969 pg/L 0.428 pg/L 0.992 pg/L 0.470 pg/L 0.699 pg/L 0.371 pg/L 7.09 pg/L 2.65 pg/L	EB05-SA8N-SB-042811
BLK1300B371412	5/16/2011 2:12:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF OCDD OCDF	2.30 pg/L 3.35 pg/L 0.954 pg/L 0.564 pg/L 0.297 pg/L 0.927 pg/L 0.542 pg/L 0.287 pg/L 1.22 pg/L 0.759 pg/L 4.78 pg/L 2.21 pg/L	EB07-SA8N-SS-042011

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB05-SA8N-SB-042811(RES)	1,2,3,4,6,7,8-HPCDD	2.21 pg/L	2.21U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,4,6,7,8-HPCDF	1.03 pg/L	1.03U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,4,7,8,9-HPCDF	0.416 pg/L	0.416U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,4,7,8-HXCDF	0.215 pg/L	0.215U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,6,7,8-HXCDD	0.530 pg/L	0.530U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,6,7,8-HXCDF	0.489 pg/L	0.489U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,7,8,9-HXCDD	0.400 pg/L	0.400U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,7,8,9-HXCDF	0.432 pg/L	0.432U pg/L
EB05-SA8N-SB-042811(RES)	1,2,3,7,8-PECDF	0.331 pg/L	0.331U pg/L
EB05-SA8N-SB-042811(RES)	2,3,4,6,7,8-HXCDF	0.361 pg/L	0.361U pg/L
EB05-SA8N-SB-042811(RES)	2,3,4,7,8-PECDF	0.763 pg/L	0.763U pg/L
EB05-SA8N-SB-042811(RES)	OCDD	5.10 pg/L	5.10U pg/L
EB05-SA8N-SB-042811(RES)	OCDF	1.28 pg/L	1.28U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,4,6,7,8-HPCDD	3.42 pg/L	3.42U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,4,6,7,8-HPCDF	4.52 pg/L	4.52U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,4,7,8,9-HPCDF	1.12 pg/L	1.12U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,4,7,8-HXCDF	1.13 pg/L	1.13U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,6,7,8-HXCDD	0.328 pg/L	0.328U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,6,7,8-HXCDF	0.755 pg/L	0.755U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,7,8,9-HXCDD	0.478 pg/L	0.478U pg/L
EB07-SA8N-SS-042011(RES)	1,2,3,7,8-PECDF	0.410 pg/L	0.410U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
EB07-SA8N-SS-042011(RES)	2,3,4,6,7,8-HXCDF	1.70 pg/L	1.70U pg/L
EB07-SA8N-SS-042011(RES)	2,3,4,7,8-PECDF	0.612 pg/L	0.612U pg/L
EB07-SA8N-SS-042011(RES)	OCDD	6.51 pg/L	6.51U pg/L
EB07-SA8N-SS-042011(RES)	OCDF	3.03 pg/L	3.03U pg/L

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1170B371949	4/29/2011 7:49:00 PM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDF OCDD OCDF	0.177 ng/Kg 0.111 ng/Kg 0.0411 ng/Kg 0.0158 ng/Kg 0.0579 ng/Kg 0.0295 ng/Kg 0.0471 ng/Kg 0.0182 ng/Kg 0.0679 ng/Kg 0.0326 ng/Kg 0.0496 ng/Kg 0.0750 ng/Kg 0.0301 ng/Kg 0.362 ng/Kg 0.209 ng/Kg	SL-098-SA8N-SS-0.0-0.5 SL-101-SA8N-SS-0.0-0.5 SL-102-SA8N-SS-0.0-0.5 SL-108-SA8N-SS-0.0-0.5 SL-120-SA8N-SS-0.0-0.5 SL-127-SA8N-SS-0.0-0.5 SL-136-SA8N-SS-0.0-0.5 SL-137-SA8N-SS-0.0-0.5
BLK1220B370536	5/10/2011 5:36:00 AM	2,3,7,8-TCDF	0.0340 ng/Kg	DUP05-SA8N-QC-042011 SL-128-SA8N-SS-0.0-0.5 SL-129-SA8N-SS-0.0-0.5
BLK1220B370705	5/5/2011 7:05:00 AM	1,2,3,4,6,7,8-HPCDD 1,2,3,4,6,7,8-HPCDF 1,2,3,4,7,8,9-HPCDF 1,2,3,4,7,8-HxCDD 1,2,3,4,7,8-HXCDF 1,2,3,6,7,8-HXCDD 1,2,3,6,7,8-HXCDF 1,2,3,7,8,9-HXCDD 1,2,3,7,8,9-HXCDF 1,2,3,7,8-PECDD 1,2,3,7,8-PECDF 2,3,4,6,7,8-HXCDF 2,3,4,7,8-PECDF 2,3,7,8-TCDD OCDD OCDF	0.173 ng/Kg 0.0881 ng/Kg 0.0487 ng/Kg 0.0242 ng/Kg 0.0612 ng/Kg 0.0426 ng/Kg 0.0458 ng/Kg 0.0398 ng/Kg 0.0821 ng/Kg 0.0512 ng/Kg 0.0563 ng/Kg 0.0520 ng/Kg 0.0781 ng/Kg 0.0183 ng/Kg 0.359 ng/Kg 0.148 ng/Kg	SL-041-SA8N-SB-4.0-5.0 SL-041-SA8N-SB-9.0-10.0

Method Blank Outlier Report

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1220B371838	5/4/2011 6:38:00 PM	1,2,3,4,6,7,8-HPCDD	0.160 ng/Kg	DUP05-SA8N-QC-042011
		1,2,3,4,6,7,8-HPCDF	0.0552 ng/Kg	SL-128-SA8N-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0327 ng/Kg	SL-129-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0176 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0299 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0563 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0395 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0587 ng/Kg	
		1,2,3,7,8-PECDD	0.0291 ng/Kg	
		1,2,3,7,8-PECDF	0.0402 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0330 ng/Kg	
		2,3,4,7,8-PECDF	0.0477 ng/Kg	
		2,3,7,8-TCDF	0.0138 ng/Kg	
		OCDD	0.283 ng/Kg	
		OCDF	0.0855 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.310 ng/Kg	0.310U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0965 ng/Kg	0.0965U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0533 ng/Kg	0.0533U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0702 ng/Kg	0.0702U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0817 ng/Kg	0.0817U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.115 ng/Kg	0.115U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0628 ng/Kg	0.0628U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.302 ng/Kg	0.302U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0847 ng/Kg	0.0847U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0924 ng/Kg	0.0924U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0595 ng/Kg	0.0595U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0988 ng/Kg	0.0988U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	OCDD	1.05 ng/Kg	1.05U ng/Kg
SL-041-SA8N-SB-4.0-5.0(RES)	OCDF	0.151 ng/Kg	0.151U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.226 ng/Kg	0.226U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.0745 ng/Kg	0.0745U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0431 ng/Kg	0.0431U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0569 ng/Kg	0.0569U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0607 ng/Kg	0.0607U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0467 ng/Kg	0.0467U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0554 ng/Kg	0.0554U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0609 ng/Kg	0.0609U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0625 ng/Kg	0.0625U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0944 ng/Kg	0.0944U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0978 ng/Kg	0.0978U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0426 ng/Kg	0.0426U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.103 ng/Kg	0.103U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0291 ng/Kg	0.0291U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	OCDD	0.662 ng/Kg	0.662U ng/Kg
SL-041-SA8N-SB-9.0-10.0(RES)	OCDF	0.134 ng/Kg	0.134U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-098-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.128 ng/Kg	0.128U ng/Kg
SL-098-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.180 ng/Kg	0.180U ng/Kg
SL-098-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.185 ng/Kg	0.185U ng/Kg
SL-098-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.183 ng/Kg	0.183U ng/Kg
SL-098-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.286 ng/Kg	0.286U ng/Kg
SL-102-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.179 ng/Kg	0.179U ng/Kg
SL-102-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-102-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.197 ng/Kg	0.197U ng/Kg
SL-102-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.246 ng/Kg	0.246U ng/Kg
SL-129-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.150 ng/Kg	0.150U ng/Kg
SL-129-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.116 ng/Kg	0.116U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.162 ng/Kg	0.162U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.222 ng/Kg	0.222U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.107 ng/Kg	0.107U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.146 ng/Kg	0.146U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.231 ng/Kg	0.231U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.243 ng/Kg	0.243U ng/Kg
SL-136-SA8N-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.120 ng/Kg	0.120U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-120-SA8N-SS-0.0-0.5MS	1,2,3,4,6,7,8-HPCDD	141	160	40.00-135.00	-	1,2,3,4,6,7,8-HPCDD	J (all detects)
SL-120-SA8N-SS-0.0-0.5MSD (SL-120-SA8N-SS-0.0-0.5)	OCDD	405	605	40.00-135.00	-	OCDD	OCDD No Qual, >4x

Field Duplicate RPD Report

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: PrepDX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA8N-SS-0.0-0.5	DUP05-SA8N-QC-042011			
MOISTURE	6.1	6.7	9		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA8N-SS-0.0-0.5	DUP05-SA8N-QC-042011			
1,2,3,4,6,7,8-HPCDF	15.0	22.2	39	50.00	
1,2,3,4,7,8,9-HPCDF	1.51	1.83	19	50.00	
1,2,3,4,7,8-HxCDD	1.02	0.939	8	50.00	
1,2,3,4,7,8-HXCDF	2.27	2.62	14	50.00	
1,2,3,6,7,8-HXCDD	4.88	7.23	39	50.00	
1,2,3,6,7,8-HXCDF	0.970	1.29	28	50.00	
1,2,3,7,8,9-HXCDD	2.05	2.88	34	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDF	0.689	0.876	24	50.00	
2,3,4,6,7,8-HXCDF	0.948	1.28	30	50.00	
2,3,4,7,8-PECDF	1.59	1.78	11	50.00	
2,3,7,8-TCDD	0.0445	0.0542	20	50.00	
2,3,7,8-TCDF	0.453	2.51	139	50.00	
OCDF	40.1	62.6	44	50.00	
1,2,3,4,6,7,8-HPCDD	166	338	68	50.00	
1,2,3,7,8-PECDD	0.395	0.769	64	50.00	J(all detects)
1,2,3,7,8-PECDF	0.883	4.85	138	50.00	
OCDD	2070	3760	58	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB05-SA8N-SB-042811	1,2,3,4,6,7,8-HPCDD	JB	2.21	10.6	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	1.03	10.6	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.416	10.6	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.215	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.530	10.6	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.489	10.6	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.400	10.6	PQL	pg/L	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.432	10.6	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.331	10.6	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JBQ	0.361	10.6	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.763	10.6	PQL	pg/L	
	OCDD	JB	5.10	21.1	PQL	pg/L	
	OCDF	JB	1.28	21.1	PQL	pg/L	
EB07-SA8N-SS-042011	1,2,3,4,6,7,8-HPCDD	JB	3.42	9.76	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JBQ	4.52	9.76	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	1.12	9.76	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JB	1.13	9.76	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.328	9.76	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.755	9.76	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JBQ	0.478	9.76	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JQ	0.596	9.76	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDD	JQ	0.389	9.76	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.410	9.76	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.70	9.76	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.612	9.76	PQL	pg/L	
	OCDD	JBQ	6.51	19.5	PQL	pg/L	
	OCDF	JB	3.03	19.5	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-129-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.95	1.07	PQL	ng/Kg	
DUP05-SA8N-QC-042011	1,2,3,4,7,8,9-HPCDF	JB	1.83	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.939	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.62	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	1.29	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.88	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.876	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.769	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	4.85	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.28	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.78	5.36	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0542	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.707	1.07	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.310	5.89	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.0965	5.89	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0533	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0702	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0817	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.115	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0628	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.272	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.302	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0847	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0924	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0595	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0988	5.89	PQL	ng/Kg	
	OCDD	JB	1.05	11.8	PQL	ng/Kg	
	OCDF	JBQ	0.151	11.8	PQL	ng/Kg	
SL-041-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.226	5.75	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.0745	5.75	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0431	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0569	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0607	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0467	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0554	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0609	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0625	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0944	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0978	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0426	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.103	5.75	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0291	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0267	1.15	PQL	ng/Kg	
	OCDD	JB	0.662	11.5	PQL	ng/Kg	
	OCDF	JB	0.134	11.5	PQL	ng/Kg	
SL-098-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.66	6.02	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.993	6.02	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.128	6.02	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.118	6.02	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.315	6.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.469	6.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.180	6.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.493	6.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.443	6.02	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.185	6.02	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.251	6.02	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.183	6.02	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.286	6.02	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0429	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.177	1.20	PQL	ng/Kg	
	OCDF	JB	2.41	12.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-101-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.20	5.83	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.241	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.344	5.83	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.20	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.874	5.83	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.465	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.811	5.83	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.453	5.83	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.394	5.83	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.598	5.83	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.570	5.83	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.42	5.83	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0848	1.17	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.849	1.17	PQL	ng/Kg	
	OCDF	JB	5.66	11.7	PQL	ng/Kg	
SL-102-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.38	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.179	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.215	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.790	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.588	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.217	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.552	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.334	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.197	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.362	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.246	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.656	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0521	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.679	1.14	PQL	ng/Kg	
	OCDF	JB	2.89	11.4	PQL	ng/Kg	
SL-108-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	2.32	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	4.32	5.00	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.06	5.00	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.24	5.00	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.647	5.00	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.68	5.00	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.700	5.00	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.80	5.00	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.04	5.00	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.287	1.00	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.782	1.00	PQL	ng/Kg	
SL-120-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	1.51	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.02	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.27	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.88	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.970	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.05	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.689	5.28	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.395	5.28	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.883	5.28	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.948	5.28	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.59	5.28	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0445	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.453	1.06	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-127-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.59	5.34	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.402	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.526	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.767	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.39	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.581	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.42	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.563	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.549	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.28	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.495	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.03	5.34	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.135	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.645	1.07	PQL	ng/Kg	
	OCDF	JB	6.16	10.7	PQL	ng/Kg	
SL-128-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.60	5.99	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.246	5.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.310	5.99	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.539	5.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.04	5.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JQ	0.226	5.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.02	5.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.433	5.99	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.221	5.99	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.434	5.99	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.248	5.99	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.672	5.99	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0339	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.346	1.20	PQL	ng/Kg	
	OCDF	JB	6.06	12.0	PQL	ng/Kg	
SL-129-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.54	5.37	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.150	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0936	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.72	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.401	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	J	0.847	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.465	5.37	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.376	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.116	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.17	5.37	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.485	5.37	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.09	5.37	PQL	ng/Kg	
	OCDF	JB	1.52	10.7	PQL	ng/Kg	
SL-136-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.06	5.97	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.162	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.106	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.472	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.411	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.222	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.341	5.97	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.191	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.107	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.146	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.231	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.243	5.97	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0161	1.19	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.120	1.19	PQL	ng/Kg	
	OCDF	JB	2.14	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX074 **Laboratory: LL**

EDD Filename: DX074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-137-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.702	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.489	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.26	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.52	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.808	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.19	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.284	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.398	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.487	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.02	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.50	5.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0807	1.03	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.925	1.03	PQL	ng/Kg	

LDC #: 25967 R

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of
Reviewer:
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

(Y) N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	~~Associated Samples~~ Column	Qualifications
		DUP05-SA8N-QC-042011	2,3,7,8-TCDF	SP2331	R/A
		SL-129-SA8N-SS0005	↓	↓	↓

Comments:

SAMPLE DELIVERY GROUP

DX076

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Apr-2011	SL-119-SA8N-SS-0.0-0.5	6266038	N	METHOD	1613B	III
21-Apr-2011	SL-119-SA8N-SS-0.0-0.5MS	6266039	MS	METHOD	1613B	III
21-Apr-2011	SL-119-SA8N-SS-0.0-0.5MSD	6266040	MSD	METHOD	1613B	III
21-Apr-2011	DUP06-SA8N-QC-042111	6266043	FD	METHOD	1613B	III
21-Apr-2011	SL-117-SA8N-SS-0.0-0.5	6266036	N	METHOD	1613B	III
21-Apr-2011	SL-126-SA8N-SS-0.0-0.5	6266042	N	METHOD	1613B	III
21-Apr-2011	SL-118-SA8N-SS-0.0-0.5	6266037	N	METHOD	1613B	III
21-Apr-2011	SL-116-SA8N-SS-0.0-0.5	6266035	N	METHOD	1613B	III
21-Apr-2011	SL-004-SA8N-SB-4.0-5.0	6266044	N	METHOD	1613B	III
21-Apr-2011	SL-004-SA8N-SB-9.0-10.0	6266045	N	METHOD	1613B	III
21-Apr-2011	SL-005-SA8N-SB-4.0-5.0	6266046	N	METHOD	1613B	III
21-Apr-2011	SL-005-SA8N-SB-8.0-9.0	6266047	N	METHOD	1613B	III
21-Apr-2011	SL-115-SA8N-SS-0.0-0.5	6266034	N	METHOD	1613B	III
21-Apr-2011	SL-112-SA8N-SS-0.0-0.5	6266033	N	METHOD	1613B	III
21-Apr-2011	SL-111-SA8N-SS-0.0-0.5	6266032	N	METHOD	1613B	III
21-Apr-2011	SL-125-SA8N-SS-0.0-0.5	6266041	N	METHOD	1613B	III
21-Apr-2011	SL-006-SA8N-SB-4.0-5.0	6266048	N	METHOD	1613B	III
21-Apr-2011	SL-006-SA8N-SB-8.0-9.0	6266049	N	METHOD	1613B	III
04-May-2011	SL-021-SA8N-SB-4.0-5.0	6277632	N	METHOD	1613B	III
04-May-2011	SL-021-SA8N-SB-9.0-10.0	6277633	N	METHOD	1613B	III
04-May-2011	SL-080-SA8N-SB-4.0-5.0	6277634	N	METHOD	1613B	III
04-May-2011	SL-067-SA8N-SB-4.0-5.0	6277635	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP06-SA8N-QC-042111 ***Collected:*** 4/21/2011 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.17	JB	0.0317	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.224	JBQ	0.0526	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0743	JBQ	0.0441	MDL	5.32	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.473	JB	0.0381	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.490	JBQ	0.0468	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.139	JB	0.0326	MDL	5.32	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.253	JB	0.0454	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.152	J	0.0388	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0789	JBQ	0.0194	MDL	5.32	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0607	JB	0.0211	MDL	5.32	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.199	JB	0.0322	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.382	JB	0.0235	MDL	5.32	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0250	JQ	0.0145	MDL	1.06	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.0528	U	0.0528	MDL	1.06	PQL	ng/Kg	UJ	FD
OCDF	4.91	JB	0.0343	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-004-SA8N-SB-4.0-5.0 ***Collected:*** 4/21/2011 10:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.287	JB	0.0216	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JBQ	0.0216	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0727	JBQ	0.0378	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0615	JBQ	0.0145	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0218	JBQ	0.0147	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0431	JBQ	0.0123	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0304	JBQ	0.0135	MDL	5.88	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0514	J	0.0150	MDL	5.88	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0101	JB	0.00936	MDL	5.88	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0559	JBQ	0.0117	MDL	5.88	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0712	JBQ	0.0108	MDL	5.88	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0159	JBQ	0.0156	MDL	1.18	PQL	ng/Kg	U	B
OCDD	0.899	JBQ	0.0333	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.145	JBQ	0.0357	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-004-SA8N-SB-9.0-10.0 ***Collected:*** 4/21/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.587	JB	0.0308	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.153	JBQ	0.0152	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0543	JBQ	0.0274	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0236	JBQ	0.0151	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0585	JBQ	0.0135	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0516	JB	0.0155	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0498	JBQ	0.0109	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0366	JBQ	0.0148	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0492	JQ	0.0146	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0347	JBQ	0.0198	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0687	JB	0.0113	MDL	5.63	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0725	JBQ	0.0135	MDL	5.63	PQL	ng/Kg	U	B
OCDD	3.17	JB	0.0378	MDL	11.3	PQL	ng/Kg	J	Z
OCDF	0.224	JBQ	0.0344	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-005-SA8N-SB-4.0-5.0 ***Collected:*** 4/21/2011 11:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.30	JB	0.0286	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.133	JB	0.0523	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.173	JBQ	0.0531	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.118	JBQ	0.0444	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.787	JB	0.0556	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.237	JBQ	0.0368	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.380	JB	0.0522	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.112	J	0.0524	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.124	JBQ	0.0243	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0382	JBQ	0.0167	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.420	JB	0.0399	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.336	JB	0.0175	MDL	5.72	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0369	JQ	0.0212	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	1.14	JB	0.0500	MDL	11.4	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-005-SA8N-SB-8.0-9.0** ***Collected:*** **4/21/2011 12:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	1.60	JB	0.0310	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.190	JBQ	0.0558	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.422	JBQ	0.0760	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.253	JBQ	0.0522	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.46	JB	0.0780	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.545	JB	0.0443	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.23	JB	0.0738	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.227	J	0.0593	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.366	JBQ	0.0283	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0794	JB	0.0226	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.22	JB	0.0472	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.06	JB	0.0246	MDL	5.56	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0279	JBQ	0.0271	MDL	1.11	PQL	ng/Kg	U	B
OCDF	1.02	JB	0.0425	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: **SL-006-SA8N-SB-4.0-5.0** ***Collected:*** **4/21/2011 3:03:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.481	JB	0.0141	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0899	JBQ	0.0349	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.141	JB	0.0335	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.162	JB	0.0258	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.402	JB	0.0349	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.145	JBQ	0.0198	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.239	JB	0.0328	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.111	J	0.0334	MDL	5.99	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.163	JBQ	0.0199	MDL	5.99	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.114	JBQ	0.00869	MDL	5.99	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.181	JB	0.0230	MDL	5.99	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.212	JBQ	0.00977	MDL	5.99	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0448	JQ	0.0172	MDL	1.20	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0466	JB	0.0159	MDL	1.20	PQL	ng/Kg	U	B
OCDF	0.635	JB	0.0400	MDL	12.0	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-006-SA8N-SB-8.0-9.0 ***Collected:*** 4/21/2011 3:10:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.315	JB	0.0246	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.173	JB	0.0104	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0685	JBQ	0.0239	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0326	JBQ	0.0178	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0843	JB	0.0167	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0479	JBQ	0.0180	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0771	JB	0.0128	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0375	JBQ	0.0163	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0655	J	0.0187	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0574	JB	0.0223	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0748	JBQ	0.0101	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.104	JB	0.0137	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.132	JB	0.0117	MDL	5.89	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0225	JB	0.0190	MDL	1.18	PQL	ng/Kg	U	B
OCDD	1.26	JB	0.0353	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.207	JBQ	0.0437	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: SL-021-SA8N-SB-4.0-5.0 ***Collected:*** 5/4/2011 9:15:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.625	JB	0.0654	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.820	JB	0.0384	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.185	JB	0.0539	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0705	JB	0.0372	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.173	JB	0.0333	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.114	JBQ	0.0384	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.140	JB	0.0311	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.157	J	0.0358	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.293	JB	0.0332	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.108	J	0.0265	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.109	JB	0.0180	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.260	JBQ	0.0353	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.170	JB	0.0192	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0475	J	0.0289	MDL	1.15	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-021-SA8N-SB-4.0-5.0 ***Collected:*** 5/4/2011 9:15:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	1.50	JB	0.0618	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.474	JBQ	0.0504	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-021-SA8N-SB-9.0-10.0 ***Collected:*** 5/4/2011 9:25:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.39	JB	0.0972	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.12	JB	0.0365	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.614	JB	0.0524	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.253	JB	0.0472	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.432	JBQ	0.0529	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.349	JB	0.0506	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.384	JB	0.0470	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.527	J	0.0488	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.887	JB	0.0578	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.355	JQ	0.0301	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.399	JB	0.0210	MDL	5.75	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.484	JB	0.0465	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.294	JB	0.0196	MDL	5.75	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0408	JQ	0.0271	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	1.59	JB	0.0529	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-067-SA8N-SB-4.0-5.0 ***Collected:*** 5/4/2011 2:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.715	JB	0.0405	MDL	5.96	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.726	JB	0.0266	MDL	5.96	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.123	JB	0.0434	MDL	5.96	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.457	JBQ	0.0373	MDL	5.96	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.0694	JB	0.0257	MDL	5.96	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.144	JBQ	0.0326	MDL	5.96	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0996	JQ	0.0255	MDL	5.96	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.196	JBQ	0.0385	MDL	5.96	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.49	JB	0.0703	MDL	5.96	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.287	JB	0.0329	MDL	5.96	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-067-SA8N-SB-4.0-5.0 ***Collected:*** 5/4/2011 2:35:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.520	JB	0.0740	MDL	5.96	PQL	ng/Kg	J	Z
OCDD	4.13	JB	0.0711	MDL	11.9	PQL	ng/Kg	J	Z
OCDF	0.757	JBQ	0.0457	MDL	11.9	PQL	ng/Kg	U	B

Sample ID: SL-080-SA8N-SB-4.0-5.0 ***Collected:*** 5/4/2011 10:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.314	JB	0.0348	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.207	JBQ	0.0102	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0927	JB	0.0185	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0367	JB	0.0226	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0927	JB	0.0197	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0993	JB	0.0235	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0610	JBQ	0.0168	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.178	JBQ	0.0232	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.197	JBQ	0.0226	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0451	JBQ	0.0307	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.121	JBQ	0.0185	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.103	JB	0.0169	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.212	JB	0.0186	MDL	5.51	PQL	ng/Kg	U	B
OCDD	1.06	JB	0.0230	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.376	JB	0.0400	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-111-SA8N-SS-0.0-0.5 ***Collected:*** 4/21/2011 1:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.37	JB	0.0396	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.303	JB	0.0538	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.379	JB	0.0957	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.09	JB	0.0697	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.19	JB	0.0991	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.467	JB	0.0636	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.09	JB	0.0927	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.445	JQ	0.0714	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.262	JB	0.0552	MDL	5.63	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-111-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 1:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	0.987	JB	0.0629	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.570	JBQ	0.0656	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.37	JBQ	0.0648	MDL	5.63	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.800	JB	0.147	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	6.78	JB	0.0581	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-112-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 1:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	5.60	JB	0.0596	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.08	JB	0.0596	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.174	JBQ	0.0861	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.129	JB	0.0471	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.630	JB	0.0513	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.434	JB	0.0494	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.197	JB	0.0447	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.495	JB	0.0450	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.357	J	0.0501	MDL	5.67	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.156	JB	0.0399	MDL	5.67	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.313	JB	0.0334	MDL	5.67	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.219	JB	0.0436	MDL	5.67	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.441	JB	0.0363	MDL	5.67	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0322	JQ	0.0247	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.259	JBQ	0.0656	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	1.76	JB	0.0845	MDL	11.3	PQL	ng/Kg	J	Z

Sample ID: **SL-115-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 12:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	2.08	JB	0.111	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.20	JB	0.0888	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.48	JB	0.0779	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.69	JB	0.0749	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.418	JQ	0.0776	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.42	JB	0.119	MDL	5.58	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-115-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 12:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDF	1.80	JB	0.0838	MDL	5.58	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.31	JB	0.0764	MDL	5.58	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.94	JB	0.0913	MDL	5.58	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.280	J	0.0401	MDL	1.12	PQL	ng/Kg	J	Z

Sample ID: **SL-116-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 10:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.915	JBQ	0.140	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.952	JB	0.148	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.76	JB	0.103	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.45	JB	0.152	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.30	JB	0.0994	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.11	JB	0.152	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.477	J	0.107	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.728	JBQ	0.112	MDL	5.98	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.79	JB	0.107	MDL	5.98	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.40	JB	0.119	MDL	5.98	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.60	JBQ	0.128	MDL	5.98	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0806	JQ	0.0457	MDL	1.20	PQL	ng/Kg	J	Z

Sample ID: **SL-117-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.22	JB	0.0532	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.400	JBQ	0.0621	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.289	JB	0.0589	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.32	JB	0.0575	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.04	JB	0.0618	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.244	JBQ	0.0497	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.661	JB	0.0614	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.207	JQ	0.0518	MDL	5.24	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.204	JBQ	0.0374	MDL	5.24	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.133	JB	0.0412	MDL	5.24	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-117-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.373	JB	0.0441	MDL	5.24	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.823	JB	0.0419	MDL	5.24	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0533	JQ	0.0187	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.366	JBQ	0.0772	MDL	1.05	PQL	ng/Kg	J	Z
OCDF	8.95	JB	0.0440	MDL	10.5	PQL	ng/Kg	J	Z

Sample ID: **SL-118-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.71	JB	0.0481	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.313	JBQ	0.0551	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.493	JB	0.0834	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.983	JB	0.0528	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.94	JB	0.0878	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.409	JBQ	0.0492	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.13	JB	0.0811	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.264	J	0.0543	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.489	JB	0.0536	MDL	5.81	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.418	JBQ	0.0523	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.637	JBQ	0.0476	MDL	5.81	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.08	JB	0.0510	MDL	5.81	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.102	JQ	0.0263	MDL	1.16	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.513	JB	0.130	MDL	1.16	PQL	ng/Kg	J	Z
OCDF	7.40	JB	0.0392	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: **SL-119-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.14	JB	0.0368	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.247	JB	0.0510	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.204	JB	0.0467	MDL	5.34	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.476	JB	0.0391	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.568	JB	0.0471	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.256	JB	0.0360	MDL	5.34	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.358	JBQ	0.0433	MDL	5.34	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-119-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.185	JQ	0.0396	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.253	JBQ	0.0215	MDL	5.34	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.262	JB	0.0205	MDL	5.34	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.251	JB	0.0335	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.485	JB	0.0212	MDL	5.34	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0702	J	0.0171	MDL	1.07	PQL	ng/Kg	J	Z, FD
2,3,7,8-TCDF	0.114	JBQ	0.0329	MDL	1.07	PQL	ng/Kg	J	Z, FD
OCDD	186	B	0.0720	MDL	10.7	PQL	ng/Kg	J	Q, Q
OCDF	4.33	JB	0.0493	MDL	10.7	PQL	ng/Kg	J	Z

Sample ID: **SL-125-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 2:00:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	2.93	JB	0.0504	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.384	JBQ	0.0626	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.340	JB	0.104	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.972	JB	0.0862	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.970	JB	0.101	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.543	JB	0.0783	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.955	JB	0.0933	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.460	JQ	0.0746	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.359	JBQ	0.0687	MDL	6.09	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.503	JB	0.0510	MDL	6.09	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.522	JB	0.0716	MDL	6.09	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.26	JB	0.0578	MDL	6.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0583	J	0.0292	MDL	1.22	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.895	JB	0.116	MDL	1.22	PQL	ng/Kg	J	Z
OCDF	5.93	JB	0.0627	MDL	12.2	PQL	ng/Kg	J	Z

Sample ID: **SL-126-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	3.83	JB	0.115	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.453	JB	0.105	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.298	JBQ	0.0861	MDL	5.54	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **SL-126-SA8N-SS-0.0-0.5** ***Collected:*** **4/21/2011 9:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,4,7,8-HXCDF	1.30	JB	0.135	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.573	JB	0.0930	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.506	JB	0.115	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.462	J	0.0858	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.265	JB	0.0666	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.171	J	0.0562	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.288	JB	0.0587	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.04	JB	0.0636	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.45	JB	0.0586	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0441	J	0.0300	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.766	J	0.124	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	4.92	JB	0.0916	MDL	11.1	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX076

Method Blank Outlier Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1240B372029	5/6/2011 8:29:00 PM	1,2,3,4,6,7,8-HPCDD	0.234 ng/Kg	DUP06-SA8N-QC-042111
		1,2,3,4,6,7,8-HPCDF	0.146 ng/Kg	SL-004-SA8N-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0635 ng/Kg	SL-004-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0385 ng/Kg	SL-005-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0519 ng/Kg	SL-005-SA8N-SB-8.0-9.0
		1,2,3,6,7,8-HXCDD	0.0301 ng/Kg	SL-006-SA8N-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0579 ng/Kg	SL-006-SA8N-SB-8.0-9.0
		1,2,3,7,8,9-HXCDD	0.0535 ng/Kg	SL-111-SA8N-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0508 ng/Kg	SL-112-SA8N-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0166 ng/Kg	SL-115-SA8N-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0864 ng/Kg	SL-116-SA8N-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0717 ng/Kg	SL-117-SA8N-SS-0.0-0.5
		2,3,7,8-TCDF	0.0167 ng/Kg	SL-118-SA8N-SS-0.0-0.5
		OCDD	0.375 ng/Kg	SL-119-SA8N-SS-0.0-0.5
		OCDF	0.168 ng/Kg	SL-125-SA8N-SS-0.0-0.5
BLK1240B372110	5/24/2011 9:10:00 PM	2,3,7,8-TCDF	0.0476 ng/Kg	DUP06-SA8N-QC-042111
				SL-004-SA8N-SB-4.0-5.0
				SL-004-SA8N-SB-9.0-10.0
				SL-005-SA8N-SB-4.0-5.0
				SL-005-SA8N-SB-8.0-9.0
				SL-006-SA8N-SB-4.0-5.0
				SL-006-SA8N-SB-8.0-9.0
				SL-111-SA8N-SS-0.0-0.5
				SL-112-SA8N-SS-0.0-0.5
				SL-115-SA8N-SS-0.0-0.5
				SL-116-SA8N-SS-0.0-0.5
				SL-117-SA8N-SS-0.0-0.5
				SL-118-SA8N-SS-0.0-0.5
				SL-119-SA8N-SS-0.0-0.5
				SL-125-SA8N-SS-0.0-0.5
BLK1300B371554	5/13/2011 3:54:00 PM	1,2,3,4,6,7,8-HPCDD	0.222 ng/Kg	SL-021-SA8N-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.188 ng/Kg	SL-021-SA8N-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.0898 ng/Kg	SL-067-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0476 ng/Kg	SL-126-SA8N-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0433 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0438 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0492 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0800 ng/Kg	
		1,2,3,7,8-PECDF	0.0464 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.112 ng/Kg	
		2,3,4,7,8-PECDF	0.0806 ng/Kg	
		OCDD	0.374 ng/Kg	
		OCDF	0.189 ng/Kg	
BLK1370B371826	5/19/2011 6:26:00 PM	1,2,3,4,6,7,8-HPCDD	0.254 ng/Kg	SL-080-SA8N-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.188 ng/Kg	
		1,2,3,4,7,8,9-HPCDF	0.106 ng/Kg	
		1,2,3,4,7,8-HxCDD	0.0292 ng/Kg	
		1,2,3,4,7,8-HXCDF	0.0716 ng/Kg	
		1,2,3,6,7,8-HXCDD	0.0513 ng/Kg	
		1,2,3,6,7,8-HXCDF	0.0503 ng/Kg	
		1,2,3,7,8,9-HXCDD	0.0377 ng/Kg	
		1,2,3,7,8,9-HXCDF	0.0917 ng/Kg	
		1,2,3,7,8-PECDD	0.0632 ng/Kg	
		1,2,3,7,8-PECDF	0.0253 ng/Kg	
		2,3,4,6,7,8-HXCDF	0.0914 ng/Kg	
		2,3,4,7,8-PECDF	0.0780 ng/Kg	
		2,3,7,8-TCDD	0.0449 ng/Kg	
		OCDD	0.399 ng/Kg	
		OCDF	0.292 ng/Kg	

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP06-SA8N-QC-042111(RES)	1,2,3,4,7,8,9-HPCDF	0.224 ng/Kg	0.224U ng/Kg

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP06-SA8N-QC-042111(RES)	1,2,3,4,7,8-HxCDD	0.0743 ng/Kg	0.0743U ng/Kg
DUP06-SA8N-QC-042111(RES)	1,2,3,6,7,8-HXCDF	0.139 ng/Kg	0.139U ng/Kg
DUP06-SA8N-QC-042111(RES)	1,2,3,7,8,9-HXCDD	0.253 ng/Kg	0.253U ng/Kg
DUP06-SA8N-QC-042111(RES)	1,2,3,7,8-PECDD	0.0789 ng/Kg	0.0789U ng/Kg
DUP06-SA8N-QC-042111(RES)	1,2,3,7,8-PECDF	0.0607 ng/Kg	0.0607U ng/Kg
DUP06-SA8N-QC-042111(RES)	2,3,4,6,7,8-HXCDF	0.199 ng/Kg	0.199U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.287 ng/Kg	0.287U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0727 ng/Kg	0.0727U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0615 ng/Kg	0.0615U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0218 ng/Kg	0.0218U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0431 ng/Kg	0.0431U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0304 ng/Kg	0.0304U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0101 ng/Kg	0.0101U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0559 ng/Kg	0.0559U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0712 ng/Kg	0.0712U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0159 ng/Kg	0.0159U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	OCDD	0.899 ng/Kg	0.899U ng/Kg
SL-004-SA8N-SB-4.0-5.0(RES)	OCDF	0.145 ng/Kg	0.145U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.587 ng/Kg	0.587U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.153 ng/Kg	0.153U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0543 ng/Kg	0.0543U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0236 ng/Kg	0.0236U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0585 ng/Kg	0.0585U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0516 ng/Kg	0.0516U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0498 ng/Kg	0.0498U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0366 ng/Kg	0.0366U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0347 ng/Kg	0.0347U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0687 ng/Kg	0.0687U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-004-SA8N-SB-9.0-10.0(RES)	OCDF	0.224 ng/Kg	0.224U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.133 ng/Kg	0.133U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.173 ng/Kg	0.173U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.237 ng/Kg	0.237U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.124 ng/Kg	0.124U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0382 ng/Kg	0.0382U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.420 ng/Kg	0.420U ng/Kg
SL-005-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.336 ng/Kg	0.336U ng/Kg
SL-005-SA8N-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.190 ng/Kg	0.190U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-005-SA8N-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.253 ng/Kg	0.253U ng/Kg
SL-005-SA8N-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0794 ng/Kg	0.0794U ng/Kg
SL-005-SA8N-SB-8.0-9.0(RES)	2,3,7,8-TCDF	0.0279 ng/Kg	0.0279U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.481 ng/Kg	0.481U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0899 ng/Kg	0.0899U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.141 ng/Kg	0.141U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.162 ng/Kg	0.162U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.145 ng/Kg	0.145U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.239 ng/Kg	0.239U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.163 ng/Kg	0.163U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.212 ng/Kg	0.212U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0466 ng/Kg	0.0466U ng/Kg
SL-006-SA8N-SB-4.0-5.0(RES)	OCDF	0.635 ng/Kg	0.635U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.315 ng/Kg	0.315U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.173 ng/Kg	0.173U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0685 ng/Kg	0.0685U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0326 ng/Kg	0.0326U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0843 ng/Kg	0.0843U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0479 ng/Kg	0.0479U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0771 ng/Kg	0.0771U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0375 ng/Kg	0.0375U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,7,8-PECDD	0.0574 ng/Kg	0.0574U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0748 ng/Kg	0.0748U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.104 ng/Kg	0.104U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.132 ng/Kg	0.132U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	2,3,7,8-TCDF	0.0225 ng/Kg	0.0225U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	OCDD	1.26 ng/Kg	1.26U ng/Kg
SL-006-SA8N-SB-8.0-9.0(RES)	OCDF	0.207 ng/Kg	0.207U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.625 ng/Kg	0.625U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.820 ng/Kg	0.820U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0705 ng/Kg	0.0705U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.114 ng/Kg	0.114U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.293 ng/Kg	0.293U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.109 ng/Kg	0.109U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.260 ng/Kg	0.260U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.170 ng/Kg	0.170U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-021-SA8N-SB-4.0-5.0(RES)	OCDD	1.50 ng/Kg	1.50U ng/Kg
SL-021-SA8N-SB-4.0-5.0(RES)	OCDF	0.474 ng/Kg	0.474U ng/Kg
SL-021-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.484 ng/Kg	0.484U ng/Kg
SL-021-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.294 ng/Kg	0.294U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.715 ng/Kg	0.715U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.726 ng/Kg	0.726U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.123 ng/Kg	0.123U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0694 ng/Kg	0.0694U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.144 ng/Kg	0.144U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.287 ng/Kg	0.287U ng/Kg
SL-067-SA8N-SB-4.0-5.0(RES)	OCDF	0.757 ng/Kg	0.757U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.314 ng/Kg	0.314U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.207 ng/Kg	0.207U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0927 ng/Kg	0.0927U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0367 ng/Kg	0.0367U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0927 ng/Kg	0.0927U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0993 ng/Kg	0.0993U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0610 ng/Kg	0.0610U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.178 ng/Kg	0.178U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.197 ng/Kg	0.197U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0451 ng/Kg	0.0451U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.121 ng/Kg	0.121U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.212 ng/Kg	0.212U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	OCDD	1.06 ng/Kg	1.06U ng/Kg
SL-080-SA8N-SB-4.0-5.0(RES)	OCDF	0.376 ng/Kg	0.376U ng/Kg
SL-111-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.303 ng/Kg	0.303U ng/Kg
SL-112-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.174 ng/Kg	0.174U ng/Kg
SL-112-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.129 ng/Kg	0.129U ng/Kg
SL-112-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.197 ng/Kg	0.197U ng/Kg
SL-112-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.156 ng/Kg	0.156U ng/Kg
SL-112-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.219 ng/Kg	0.219U ng/Kg
SL-117-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.244 ng/Kg	0.244U ng/Kg
SL-117-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.204 ng/Kg	0.204U ng/Kg
SL-117-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.373 ng/Kg	0.373U ng/Kg
SL-118-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.313 ng/Kg	0.313U ng/Kg
SL-119-SA8N-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.247 ng/Kg	0.247U ng/Kg
SL-119-SA8N-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.256 ng/Kg	0.256U ng/Kg
SL-119-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.253 ng/Kg	0.253U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: PrepDX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-119-SA8N-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-126-SA8N-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.265 ng/Kg	0.265U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-119-SA8N-SS-0.0-0.5MS **SL-119-SA8N-SS-0.0-0.5MSD** (SL-119-SA8N-SS-0.0-0.5)	OCDD	228	-	40.00-135.00	49 (20.00)	OCDD	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-119-SA8N-SS-0.0-0.5	DUP06-SA8N-QC-042111			
MOISTURE	6.4	6.8	6		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-119-SA8N-SS-0.0-0.5	DUP06-SA8N-QC-042111			
1,2,3,4,6,7,8-HPCDD	14.6	17.0	15	50.00	
1,2,3,4,6,7,8-HPCDF	2.14	2.17	1	50.00	
1,2,3,4,7,8,9-HPCDF	0.247	0.224	10	50.00	
1,2,3,4,7,8-HXCDF	0.476	0.473	1	50.00	
1,2,3,6,7,8-HXCDD	0.568	0.490	15	50.00	
1,2,3,7,8,9-HXCDD	0.358	0.253	34	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDF	0.185	0.152	20	50.00	
2,3,4,6,7,8-HXCDF	0.251	0.199	23	50.00	
2,3,4,7,8-PECDF	0.485	0.382	24	50.00	
OCDD	186	206	10	50.00	
OCDF	4.33	4.91	13	50.00	
1,2,3,4,7,8-HxCDD	0.204	0.0743	93	50.00	
1,2,3,6,7,8-HXCDF	0.256	0.139	59	50.00	
1,2,3,7,8-PECDD	0.253	0.0789	105	50.00	J(all detects)
1,2,3,7,8-PECDF	0.262	0.0607	125	50.00	UJ(all non-detects)
2,3,7,8-TCDD	0.0702	0.0250	95	50.00	
2,3,7,8-TCDF	0.114	1.06 U	200	50.00	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-115-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	B	1.58	1.12	PQL	ng/Kg	
DUP06-SA8N-QC-042111	1,2,3,4,6,7,8-HPCDF	JB	2.17	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.224	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0743	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.473	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.490	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.139	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.253	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.152	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0789	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0607	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.199	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.382	5.32	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0250	1.06	PQL	ng/Kg	
	OCDF	JB	4.91	10.6	PQL	ng/Kg	
SL-004-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.287	5.88	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.185	5.88	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0727	5.88	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0615	5.88	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0218	5.88	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0431	5.88	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0304	5.88	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0514	5.88	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0101	5.88	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0559	5.88	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0712	5.88	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0159	1.18	PQL	ng/Kg	
	OCDD	JBQ	0.899	11.8	PQL	ng/Kg	
	OCDF	JBQ	0.145	11.8	PQL	ng/Kg	
SL-004-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.587	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.153	5.63	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0543	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0236	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0585	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0516	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0498	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0366	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.0492	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0347	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0687	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0725	5.63	PQL	ng/Kg	
	OCDD	JB	3.17	11.3	PQL	ng/Kg	
	OCDF	JBQ	0.224	11.3	PQL	ng/Kg	
SL-005-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.30	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.133	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.173	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.118	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.787	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.237	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.380	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.112	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.124	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0382	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.420	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.336	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0369	1.14	PQL	ng/Kg	
	OCDF	JB	1.14	11.4	PQL	ng/Kg	

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA8N-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDF	JB	1.60	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.190	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.422	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.253	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.46	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.545	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.23	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.227	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.366	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0794	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.22	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.06	5.56	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0279	1.11	PQL	ng/Kg	
	OCDF	JB	1.02	11.1	PQL	ng/Kg	
SL-006-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	0.481	5.99	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0899	5.99	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.141	5.99	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.162	5.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.402	5.99	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.145	5.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.239	5.99	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.111	5.99	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.163	5.99	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.114	5.99	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.181	5.99	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.212	5.99	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0448	1.20	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0466	1.20	PQL	ng/Kg	
	OCDF	JB	0.635	12.0	PQL	ng/Kg	
SL-006-SA8N-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.315	5.89	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.173	5.89	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0685	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0326	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0843	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0479	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0771	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0375	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.0655	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0574	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0748	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.104	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.132	5.89	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0225	1.18	PQL	ng/Kg	
	OCDD	JB	1.26	11.8	PQL	ng/Kg	
	OCDF	JBQ	0.207	11.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.625	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.820	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.185	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0705	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.173	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.114	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.140	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.157	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.293	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.108	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.109	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.260	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.170	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0475	1.15	PQL	ng/Kg	
	OCDD	JB	1.50	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.474	11.5	PQL	ng/Kg	
SL-021-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	3.39	5.75	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.12	5.75	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.614	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.253	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.432	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.349	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.384	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.527	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.887	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JQ	0.355	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.399	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.484	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.294	5.75	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0408	1.15	PQL	ng/Kg	
	OCDF	JB	1.59	11.5	PQL	ng/Kg	
SL-067-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.715	5.96	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.726	5.96	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.123	5.96	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.457	5.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0694	5.96	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.144	5.96	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JQ	0.0996	5.96	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.196	5.96	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.49	5.96	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.287	5.96	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.520	5.96	PQL	ng/Kg	
	OCDD	JB	4.13	11.9	PQL	ng/Kg	
	OCDF	JBQ	0.757	11.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-080-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.314	5.51	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.207	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0927	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0367	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0927	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0993	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0610	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.178	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.197	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0451	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.121	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.103	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.212	5.51	PQL	ng/Kg	
	OCDD	JB	1.06	11.0	PQL	ng/Kg	
	OCDF	JB	0.376	11.0	PQL	ng/Kg	
SL-111-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.37	5.63	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.303	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.379	5.63	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.09	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.19	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.467	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.09	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.445	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.262	5.63	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.987	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.570	5.63	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.37	5.63	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.800	1.13	PQL	ng/Kg	
	OCDF	JB	6.78	11.3	PQL	ng/Kg	
SL-112-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	5.60	5.67	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.08	5.67	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.174	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.129	5.67	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.630	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.434	5.67	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.197	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.495	5.67	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.357	5.67	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.156	5.67	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.313	5.67	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.219	5.67	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.441	5.67	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0322	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.259	1.13	PQL	ng/Kg	
	OCDF	JB	1.76	11.3	PQL	ng/Kg	
SL-115-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.08	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.20	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.48	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.69	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.418	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	1.42	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.80	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.31	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.94	5.58	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.280	1.12	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-116-SA8N-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	0.915	5.98	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.952	5.98	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.76	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.45	5.98	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.30	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.11	5.98	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.477	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.728	5.98	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.79	5.98	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.40	5.98	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	2.60	5.98	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0806	1.20	PQL	ng/Kg	
SL-117-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.22	5.24	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.400	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.289	5.24	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.32	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.04	5.24	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.244	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.661	5.24	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.207	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.204	5.24	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.133	5.24	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.373	5.24	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.823	5.24	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0533	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.366	1.05	PQL	ng/Kg	
	OCDF	JB	8.95	10.5	PQL	ng/Kg	
SL-118-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.71	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.313	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.493	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.983	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.94	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.409	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.13	5.81	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	J	0.264	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.489	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.418	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.637	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.08	5.81	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.102	1.16	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.513	1.16	PQL	ng/Kg	
	OCDF	JB	7.40	11.6	PQL	ng/Kg	
SL-119-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.14	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.247	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.204	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.476	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.568	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.256	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.358	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.185	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.253	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.262	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.251	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.485	5.34	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0702	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.114	1.07	PQL	ng/Kg	
	OCDF	JB	4.33	10.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX076 **Laboratory: LL**

EDD Filename: DX076_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-125-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.93	6.09	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.384	6.09	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.340	6.09	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.972	6.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.970	6.09	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.543	6.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.955	6.09	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JQ	0.460	6.09	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.359	6.09	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.503	6.09	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.522	6.09	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.26	6.09	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0583	1.22	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.895	1.22	PQL	ng/Kg	
	OCDF	JB	5.93	12.2	PQL	ng/Kg	
SL-126-SA8N-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.83	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.453	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.298	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.30	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.573	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.506	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	J	0.462	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.265	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	J	0.171	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.288	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.04	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.45	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0441	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.766	1.11	PQL	ng/Kg	
	OCDF	JB	4.92	11.1	PQL	ng/Kg	

LDC #: 25907R

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Page: 1 of 1
Reviewer: OR
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA Method 1613B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

All available information pertaining to the data were reviewed using professional judgement to compliment the determination of the overall quality of the data.

(Y) N N/A Was the overall quality and usability of the data acceptable?

#	Date	Sample ID	Finding	Colum ~~Associated Samples~~	Qualifications
		SL-115-SA8N-SS-0.0-0.5	2,3,7,8-TCDF	SP2331	R/A

Comments: _____

SAMPLE DELIVERY GROUP

DX077

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Apr-2011	SL-007-SA8N-SB-4.0-5.0	6267482	N	METHOD	1613B	III
22-Apr-2011	SL-007-SA8N-SB-9.0-10.0	6267483	N	METHOD	1613B	III
22-Apr-2011	SL-010-SA8N-SB-4.0-5.0	6267484	N	METHOD	1613B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0	6267488	N	METHOD	1613B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MS	6267489	MS	METHOD	1613B	III
22-Apr-2011	SL-064-SA5A-SB-3.0-4.0MSD	6267490	MSD	METHOD	1613B	III
22-Apr-2011	DUP16-SA5A-QC-042211	6267494	FD	METHOD	1613B	III
22-Apr-2011	SL-010-SA8N-SB-9.0-10.0	6267485	N	METHOD	1613B	III
22-Apr-2011	SL-011-SA8N-SB-9.0-10.0	6267487	N	METHOD	1613B	III
22-Apr-2011	SL-011-SA8N-SB-4.0-5.0	6267486	N	METHOD	1613B	III
22-Apr-2011	SL-166-SA5A-SS-0.0-0.5	6267491	N	METHOD	1613B	III
22-Apr-2011	SL-253-SA5A-SB-4.0-5.0	6267492	N	METHOD	1613B	III
22-Apr-2011	SL-253-SA5A-SB-8.0-9.0	6267493	N	METHOD	1613B	III
02-May-2011	SL-012-SA8N-SB-4.0-5.0	6273949	N	METHOD	1613B	III
02-May-2011	SL-050-SA8N-SB-4.0-5.0	6273952	N	METHOD	1613B	III
02-May-2011	SL-050-SA8N-SB-9.0-10.0	6273953	N	METHOD	1613B	III
02-May-2011	SL-022-SA8N-SB-4.0-5.0	6273950	N	METHOD	1613B	III
02-May-2011	SL-022-SA8N-SB-9.0-10.0	6273951	N	METHOD	1613B	III
02-May-2011	SL-023-SA8N-SB-4.0-5.0	6273954	N	METHOD	1613B	III
02-May-2011	SL-023-SA8N-SB-9.0-10.0	6273955	N	METHOD	1613B	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP16-SA5A-QC-042211 ***Collected:*** 4/22/2011 11:15:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.433	JBQ	0.0248	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.153	JB	0.0101	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0584	JBQ	0.0176	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0145	U	0.0145	MDL	5.48	PQL	ng/Kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.0468	JB	0.0116	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.0419	JB	0.0150	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.0346	JBQ	0.00984	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.0614	JB	0.0147	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDF	0.0892	JB	0.0125	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.0219	JBQ	0.0172	MDL	5.48	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0338	JBQ	0.00917	MDL	5.48	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0601	JBQ	0.0107	MDL	5.48	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0695	JBQ	0.0101	MDL	5.48	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0267	JBQ	0.0171	MDL	1.10	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0149	U	0.0149	MDL	1.10	PQL	ng/Kg	UJ	FD
OCDD	2.65	JB	0.0365	MDL	11.0	PQL	ng/Kg	J	Z
OCDF	0.249	JBQ	0.0271	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-007-SA8N-SB-4.0-5.0 ***Collected:*** 4/22/2011 9:33:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.305	JB	0.0202	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.248	JB	0.00977	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0634	JB	0.0151	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0236	JBQ	0.0110	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0674	JB	0.0121	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0196	JBQ	0.0117	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0576	JBQ	0.0105	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0413	JB	0.0108	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0689	JB	0.0134	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0404	JBQ	0.0138	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0397	JBQ	0.00698	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0857	JB	0.0112	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0851	JB	0.00709	MDL	5.73	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-007-SA8N-SB-4.0-5.0 *Collected:* 4/22/2011 9:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0222	JB	0.0151	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0162	JQ	0.0138	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.851	JB	0.0288	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.209	JB	0.0219	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-007-SA8N-SB-9.0-10.0 *Collected:* 4/22/2011 9:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.205	JB	0.0174	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.125	JB	0.00843	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0440	JBQ	0.0125	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0263	JBQ	0.0102	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0141	JBQ	0.0130	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0293	JBQ	0.00889	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0309	JBQ	0.0127	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0386	JBQ	0.0111	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0279	JB	0.0156	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0234	JBQ	0.00739	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0430	JBQ	0.00935	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0642	JB	0.00774	MDL	5.71	PQL	ng/Kg	U	B
OCDD	0.446	JB	0.0217	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.136	JBQ	0.0245	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-010-SA8N-SB-4.0-5.0 *Collected:* 4/22/2011 11:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.209	JB	0.0172	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.229	JB	0.00890	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0483	JBQ	0.0136	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0135	JBQ	0.0110	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0614	JB	0.0109	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0211	JB	0.0114	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0373	JBQ	0.00972	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0168	JBQ	0.0110	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0118	JBQ	0.00738	MDL	5.76	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: **SL-010-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0709	JBQ	0.0102	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0750	JBQ	0.00761	MDL	5.76	PQL	ng/Kg	U	B
OCDD	0.530	JB	0.0221	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.191	JB	0.0226	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: **SL-010-SA8N-SB-9.0-10.0** ***Collected:*** **4/22/2011 11:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.225	JB	0.0150	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.233	JB	0.00828	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0351	JB	0.0124	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0152	JBQ	0.0123	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0555	JBQ	0.00911	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0203	JBQ	0.0125	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0368	JBQ	0.00817	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0244	JBQ	0.0118	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0160	JB	0.0133	MDL	5.81	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0153	JB	0.00675	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0725	JB	0.00828	MDL	5.81	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0696	JB	0.00686	MDL	5.81	PQL	ng/Kg	U	B
OCDD	0.528	JB	0.0192	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.197	JBQ	0.0173	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: **SL-011-SA8N-SB-4.0-5.0** ***Collected:*** **4/22/2011 12:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.316	JB	0.0189	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JB	0.00805	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0556	JBQ	0.0138	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0147	JBQ	0.0128	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0477	JBQ	0.0112	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0175	JBQ	0.0130	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0386	JBQ	0.00970	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0355	JB	0.0129	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0252	JBQ	0.0150	MDL	5.71	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-011-SA8N-SB-4.0-5.0 ***Collected:*** 4/22/2011 12:52:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,6,7,8-HXCDF	0.0817	JB	0.0105	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0703	JB	0.00864	MDL	5.71	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0174	JBQ	0.0153	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0173	J	0.0160	MDL	1.14	PQL	ng/Kg	J	Z
OCDD	1.22	JB	0.0272	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.214	JBQ	0.0264	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-011-SA8N-SB-9.0-10.0 ***Collected:*** 4/22/2011 12:12:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.285	JB	0.0218	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.263	JB	0.0103	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0646	JBQ	0.0158	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0601	JBQ	0.0135	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.123	JBQ	0.0156	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0710	JBQ	0.0138	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.105	JB	0.0140	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0728	JB	0.0135	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0838	JBQ	0.0171	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0782	JBQ	0.0170	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0789	JBQ	0.00891	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.127	JB	0.0144	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.138	JB	0.00914	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0191	JQ	0.0148	MDL	1.12	PQL	ng/Kg	J	Z
OCDD	0.929	JBQ	0.0309	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.260	JB	0.0314	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-012-SA8N-SB-4.0-5.0 ***Collected:*** 5/2/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.275	JBQ	0.0271	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.127	JBQ	0.0136	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0449	JB	0.0232	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0240	JBQ	0.0193	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0416	JBQ	0.0169	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-012-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 9:20:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,6,7,8-HXCDD	0.112	JBQ	0.0199	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0354	JBQ	0.0150	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.189	JB	0.0190	MDL	5.85	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.287	JB	0.0201	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0500	JBQ	0.0199	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0411	JBQ	0.00972	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0594	JBQ	0.0161	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0678	JBQ	0.0104	MDL	5.85	PQL	ng/Kg	U	B
OCDD	0.670	JBQ	0.0344	MDL	11.7	PQL	ng/Kg	U	B
OCDF	0.141	JB	0.0360	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-022-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 12:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.305	JB	0.0167	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.125	JBQ	0.00805	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0493	JBQ	0.0187	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0453	JB	0.0134	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0897	JB	0.0144	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0252	JBQ	0.0103	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.163	JB	0.0135	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.300	JB	0.0163	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0354	JB	0.0133	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0788	JBQ	0.00758	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0621	JB	0.0119	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0584	JB	0.00840	MDL	5.56	PQL	ng/Kg	U	B
OCDD	0.992	JB	0.0257	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.158	JBQ	0.0265	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: **SL-022-SA8N-SB-9.0-10.0** ***Collected:*** **5/2/2011 12:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.563	JB	0.0282	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.185	JBQ	0.00942	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0573	JB	0.0193	MDL	5.85	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-022-SA8N-SB-9.0-10.0** ***Collected:*** **5/2/2011 12:15:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.0328	JBQ	0.0155	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0998	JB	0.0138	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0652	JBQ	0.0160	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0882	JB	0.0108	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0538	JBQ	0.0153	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0576	JBQ	0.0172	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0734	JBQ	0.0162	MDL	5.85	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.124	JBQ	0.00918	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0981	JBQ	0.0123	MDL	5.85	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.113	JB	0.0106	MDL	5.85	PQL	ng/Kg	U	B
OCDD	3.07	JB	0.0386	MDL	11.7	PQL	ng/Kg	J	Z
OCDF	0.302	JB	0.0340	MDL	11.7	PQL	ng/Kg	U	B

Sample ID: **SL-023-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 3:45:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.462	JB	0.0424	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.201	JB	0.0147	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.132	JB	0.0414	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0649	JBQ	0.0265	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0918	JBQ	0.0226	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.139	JBQ	0.0272	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0916	JB	0.0167	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.224	JB	0.0253	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.324	JB	0.0282	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0938	JBQ	0.0163	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.137	JB	0.00781	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.105	JBQ	0.0202	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.129	JB	0.00911	MDL	5.89	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0615	JBQ	0.0142	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0180	J	0.0133	MDL	1.18	PQL	ng/Kg	J	Z
OCDD	1.66	JB	0.0370	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.280	JB	0.0540	MDL	11.8	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-023-SA8N-SB-9.0-10.0** ***Collected:*** **5/2/2011 3:50:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	3.65	JB	0.0427	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.471	JB	0.0160	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.105	JBQ	0.0407	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0923	JBQ	0.0285	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0814	JBQ	0.0187	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.211	JB	0.0294	MDL	5.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0723	JB	0.0151	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.140	JB	0.0281	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0996	JB	0.0250	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0649	JB	0.0167	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0565	JBQ	0.00895	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.103	JB	0.0174	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0821	JB	0.0104	MDL	5.90	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0339	JBQ	0.0157	MDL	1.18	PQL	ng/Kg	U	B
OCDF	0.866	JBQ	0.0502	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: **SL-050-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.303	JB	0.0153	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.164	JB	0.00761	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0680	JB	0.0153	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0825	JB	0.0162	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.144	JB	0.0162	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.192	JB	0.0166	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.136	JB	0.0133	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.261	JB	0.0162	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.359	JB	0.0205	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.148	JB	0.0145	MDL	5.72	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.222	JB	0.00809	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.134	JB	0.0152	MDL	5.72	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.181	JB	0.00916	MDL	5.72	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0367	JBQ	0.0130	MDL	1.14	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0521	J	0.0119	MDL	1.14	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-050-SA8N-SB-4.0-5.0** ***Collected:*** **5/2/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDD	0.991	JB	0.0220	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.182	JB	0.0195	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: **SL-050-SA8N-SB-9.0-10.0** ***Collected:*** **5/2/2011 10:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.216	JB	0.0153	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.148	JB	0.00701	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0766	JB	0.0179	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0727	JBQ	0.0139	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.179	JB	0.0150	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0691	JBQ	0.0143	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.120	JB	0.0114	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0791	JB	0.0138	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.139	JB	0.0185	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.172	JBQ	0.0140	MDL	5.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.214	JB	0.00796	MDL	5.90	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.109	JBQ	0.0132	MDL	5.90	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.221	JB	0.00926	MDL	5.90	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0622	JBQ	0.0143	MDL	1.18	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0575	J	0.0120	MDL	1.18	PQL	ng/Kg	J	Z
OCDD	0.467	JB	0.0190	MDL	11.8	PQL	ng/Kg	U	B
OCDF	0.172	JB	0.0291	MDL	11.8	PQL	ng/Kg	U	B

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.547	JB	0.0213	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.350	JB	0.0102	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.101	JB	0.0182	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.119	JB	0.0164	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.217	JB	0.0197	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.144	JB	0.0168	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.186	JB	0.0165	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8,9-HXCDD	0.152	JB	0.0159	MDL	5.44	PQL	ng/Kg	UJ	B, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: **SL-064-SA5A-SB-3.0-4.0** ***Collected:*** **4/22/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.200	JB	0.0211	MDL	5.44	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDD	0.238	JB	0.0142	MDL	5.44	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.234	JB	0.00830	MDL	5.44	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.201	JB	0.0180	MDL	5.44	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.252	JB	0.00886	MDL	5.44	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0527	JB	0.0123	MDL	1.09	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0441	J	0.0114	MDL	1.09	PQL	ng/Kg	J	Z, FD
OCDD	3.90	JB	0.0180	MDL	10.9	PQL	ng/Kg	J	Z
OCDF	0.365	JB	0.0211	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: **SL-166-SA5A-SS-0.0-0.5** ***Collected:*** **4/22/2011 1:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.439	JB	0.0445	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.267	JB	0.0174	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.166	JB	0.0314	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.0294	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.253	JB	0.0267	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.203	JB	0.0298	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.256	JB	0.0235	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.251	JB	0.0289	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.356	JB	0.0284	MDL	5.05	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.311	JB	0.0229	MDL	5.05	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.339	JB	0.0117	MDL	5.05	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.204	JB	0.0246	MDL	5.05	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.321	JB	0.0127	MDL	5.05	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.131	JB	0.0193	MDL	1.01	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0875	J	0.0143	MDL	1.01	PQL	ng/Kg	J	Z
OCDD	2.28	JB	0.0431	MDL	10.1	PQL	ng/Kg	J	Z
OCDF	0.375	JB	0.0487	MDL	10.1	PQL	ng/Kg	U	B

Sample ID: **SL-253-SA5A-SB-4.0-5.0** ***Collected:*** **4/22/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.82	JB	0.0289	MDL	5.76	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-253-SA5A-SB-4.0-5.0 **Collected:** 4/22/2011 3:30:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.423	JB	0.0555	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.320	JB	0.0631	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.406	JB	0.0456	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.696	JB	0.0652	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.301	JB	0.0387	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.500	JB	0.0615	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.225	JBQ	0.0558	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.226	JB	0.0262	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.237	JBQ	0.0142	MDL	5.76	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.422	JB	0.0432	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.299	JB	0.0160	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0454	JBQ	0.0189	MDL	1.15	PQL	ng/Kg	U	B

Sample ID: SL-253-SA5A-SB-8.0-9.0 **Collected:** 4/22/2011 4:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.272	JB	0.0199	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.145	JB	0.00906	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0477	JBQ	0.0170	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0525	JB	0.00951	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0351	JB	0.0121	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0322	JB	0.00794	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0355	JB	0.0113	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0304	JBQ	0.0105	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0317	JBQ	0.00660	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0629	JB	0.00861	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0447	JB	0.00716	MDL	5.55	PQL	ng/Kg	U	B
OCDD	0.921	JBQ	0.0312	MDL	11.1	PQL	ng/Kg	U	B
OCDF	0.196	JB	0.0295	MDL	11.1	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

C	Initial Calibration Verification Percent Difference Lower Estimation
C	Initial Calibration Verification Percent Difference Lower Rejection
C	Initial Calibration Verification Percent Difference Upper Estimation
C	Initial Calibration Verification Percent Difference Upper Rejection
C	Initial Calibration Verification Percent Recovery Lower Estimation
C	Initial Calibration Verification Percent Recovery Lower Rejection
C	Initial Calibration Verification Percent Recovery Upper Estimation
C	Initial Calibration Verification Percent Recovery Upper Rejection
C	Initial Calibration Verification Relative Response Factor
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Laboratory Triplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination
FD	Field Duplicate Precision
FT	Field Triplicate Precision
H	Extraction to Analysis Estimation
H	Extraction to Analysis Rejection
H	Preservation
H	Sampling to Analysis Estimation
H	Sampling to Analysis Rejection
H	Sampling to Extraction Estimation
H	Sampling to Extraction Rejection
H	Sampling to Leaching Estimation
H	Sampling to Leaching Rejection
H	Temperature Estimation
H	Temperature Rejection
I	Internal Standard Estimation
I	Internal Standard Rejection
L	Laboratory Control Precision
L	Laboratory Control Spike Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

L	Laboratory Control Spike Lower Rejection
L	Laboratory Control Spike Upper Estimation
L	Laboratory Control Spike Upper Rejection
M	Continuing Tune
M	Initial Tune
M	Performance Evaluation Mixture
M	Resolution Check Mixture
Q	Laboratory Duplicate Precision
Q	Laboratory Triplicate Precision
Q	Matrix Spike Lower Estimation
Q	Matrix Spike Lower Rejection
Q	Matrix Spike Precision
Q	Matrix Spike Upper Estimation
Q	Matrix Spike Upper Rejection
S	Surrogate/Tracer Recovery Lower Estimation
S	Surrogate/Tracer Recovery Lower Rejection
S	Surrogate/Tracer Recovery Upper Estimation
S	Surrogate/Tracer Recovery Upper Rejection
T	Trip Blank Contamination
Z	Reporting Limit
Z	Reporting Limit > Project Maximum Contamination Limit
Z	Reporting Limit Trace Value

* denotes a non-reportable result

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX077

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLK1250B372126	5/7/2011 9:26:00 PM	1,2,3,4,6,7,8-HPCDD	0.205 ng/Kg	DUP16-SA5A-QC-042211
		1,2,3,4,6,7,8-HPCDF	0.236 ng/Kg	SL-007-SA8N-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0899 ng/Kg	SL-007-SA8N-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0157 ng/Kg	SL-010-SA8N-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0841 ng/Kg	SL-010-SA8N-SB-9.0-10.0
		1,2,3,6,7,8-HXCDD	0.0351 ng/Kg	SL-011-SA8N-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0651 ng/Kg	SL-011-SA8N-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0315 ng/Kg	SL-012-SA8N-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.0834 ng/Kg	SL-022-SA8N-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0388 ng/Kg	SL-022-SA8N-SB-9.0-10.0
		1,2,3,7,8-PECDF	0.0393 ng/Kg	SL-023-SA8N-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.104 ng/Kg	SL-023-SA8N-SB-9.0-10.0
		2,3,4,7,8-PECDF	0.0837 ng/Kg	SL-050-SA8N-SB-4.0-5.0
		2,3,7,8-TCDD	0.0302 ng/Kg	SL-050-SA8N-SB-9.0-10.0
		OCDD	0.439 ng/Kg	SL-064-SA5A-SB-3.0-4.0
		OCDF	0.285 ng/Kg	SL-166-SA5A-SS-0.0-0.5
				SL-253-SA5A-SB-4.0-5.0
				SL-253-SA5A-SB-8.0-9.0

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
DUP16-SA5A-QC-042211(RES)	1,2,3,4,6,7,8-HPCDD	0.433 ng/Kg	0.433U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,4,6,7,8-HPCDF	0.153 ng/Kg	0.153U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,4,7,8,9-HPCDF	0.0584 ng/Kg	0.0584U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,4,7,8-HXCDF	0.0468 ng/Kg	0.0468U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,6,7,8-HXCDD	0.0419 ng/Kg	0.0419U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,6,7,8-HXCDF	0.0346 ng/Kg	0.0346U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8,9-HXCDD	0.0614 ng/Kg	0.0614U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8,9-HXCDF	0.0892 ng/Kg	0.0892U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8-PECDD	0.0219 ng/Kg	0.0219U ng/Kg
DUP16-SA5A-QC-042211(RES)	1,2,3,7,8-PECDF	0.0338 ng/Kg	0.0338U ng/Kg
DUP16-SA5A-QC-042211(RES)	2,3,4,6,7,8-HXCDF	0.0601 ng/Kg	0.0601U ng/Kg
DUP16-SA5A-QC-042211(RES)	2,3,4,7,8-PECDF	0.0695 ng/Kg	0.0695U ng/Kg
DUP16-SA5A-QC-042211(RES)	2,3,7,8-TCDD	0.0267 ng/Kg	0.0267U ng/Kg
DUP16-SA5A-QC-042211(RES)	OCDF	0.249 ng/Kg	0.249U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.305 ng/Kg	0.305U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.248 ng/Kg	0.248U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0634 ng/Kg	0.0634U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0236 ng/Kg	0.0236U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0674 ng/Kg	0.0674U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0196 ng/Kg	0.0196U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0576 ng/Kg	0.0576U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.0689 ng/Kg	0.0689U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0404 ng/Kg	0.0404U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0397 ng/Kg	0.0397U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-007-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0857 ng/Kg	0.0857U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0851 ng/Kg	0.0851U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0222 ng/Kg	0.0222U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	OCDD	0.851 ng/Kg	0.851U ng/Kg
SL-007-SA8N-SB-4.0-5.0(RES)	OCDF	0.209 ng/Kg	0.209U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.205 ng/Kg	0.205U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.125 ng/Kg	0.125U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0440 ng/Kg	0.0440U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0263 ng/Kg	0.0263U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0141 ng/Kg	0.0141U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0293 ng/Kg	0.0293U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0309 ng/Kg	0.0309U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0386 ng/Kg	0.0386U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0279 ng/Kg	0.0279U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0234 ng/Kg	0.0234U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0430 ng/Kg	0.0430U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0642 ng/Kg	0.0642U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	OCDD	0.446 ng/Kg	0.446U ng/Kg
SL-007-SA8N-SB-9.0-10.0(RES)	OCDF	0.136 ng/Kg	0.136U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.209 ng/Kg	0.209U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.229 ng/Kg	0.229U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0483 ng/Kg	0.0483U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0135 ng/Kg	0.0135U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0614 ng/Kg	0.0614U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0211 ng/Kg	0.0211U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0373 ng/Kg	0.0373U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0168 ng/Kg	0.0168U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0118 ng/Kg	0.0118U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0709 ng/Kg	0.0709U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	OCDD	0.530 ng/Kg	0.530U ng/Kg
SL-010-SA8N-SB-4.0-5.0(RES)	OCDF	0.191 ng/Kg	0.191U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.225 ng/Kg	0.225U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.233 ng/Kg	0.233U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0351 ng/Kg	0.0351U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0152 ng/Kg	0.0152U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0555 ng/Kg	0.0555U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0203 ng/Kg	0.0203U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0368 ng/Kg	0.0368U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0244 ng/Kg	0.0244U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0160 ng/Kg	0.0160U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0153 ng/Kg	0.0153U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0725 ng/Kg	0.0725U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0696 ng/Kg	0.0696U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	OCDD	0.528 ng/Kg	0.528U ng/Kg
SL-010-SA8N-SB-9.0-10.0(RES)	OCDF	0.197 ng/Kg	0.197U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.316 ng/Kg	0.316U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0556 ng/Kg	0.0556U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0147 ng/Kg	0.0147U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0477 ng/Kg	0.0477U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0175 ng/Kg	0.0175U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0386 ng/Kg	0.0386U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0252 ng/Kg	0.0252U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0817 ng/Kg	0.0817U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0703 ng/Kg	0.0703U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0174 ng/Kg	0.0174U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	OCDD	1.22 ng/Kg	1.22U ng/Kg
SL-011-SA8N-SB-4.0-5.0(RES)	OCDF	0.214 ng/Kg	0.214U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.285 ng/Kg	0.285U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.263 ng/Kg	0.263U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0646 ng/Kg	0.0646U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0601 ng/Kg	0.0601U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.123 ng/Kg	0.123U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0710 ng/Kg	0.0710U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0728 ng/Kg	0.0728U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0838 ng/Kg	0.0838U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0782 ng/Kg	0.0782U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0789 ng/Kg	0.0789U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.127 ng/Kg	0.127U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.138 ng/Kg	0.138U ng/Kg
SL-011-SA8N-SB-9.0-10.0(RES)	OCDD	0.929 ng/Kg	0.929U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-011-SA8N-SB-9.0-10.0(RES)	OCDF	0.260 ng/Kg	0.260U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.275 ng/Kg	0.275U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.127 ng/Kg	0.127U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0449 ng/Kg	0.0449U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0240 ng/Kg	0.0240U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0416 ng/Kg	0.0416U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.112 ng/Kg	0.112U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0354 ng/Kg	0.0354U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.287 ng/Kg	0.287U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0500 ng/Kg	0.0500U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0411 ng/Kg	0.0411U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0594 ng/Kg	0.0594U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0678 ng/Kg	0.0678U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	OCDD	0.670 ng/Kg	0.670U ng/Kg
SL-012-SA8N-SB-4.0-5.0(RES)	OCDF	0.141 ng/Kg	0.141U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.305 ng/Kg	0.305U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.125 ng/Kg	0.125U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0493 ng/Kg	0.0493U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0453 ng/Kg	0.0453U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.0897 ng/Kg	0.0897U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0252 ng/Kg	0.0252U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.300 ng/Kg	0.300U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0354 ng/Kg	0.0354U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0788 ng/Kg	0.0788U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0621 ng/Kg	0.0621U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.0584 ng/Kg	0.0584U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	OCDD	0.992 ng/Kg	0.992U ng/Kg
SL-022-SA8N-SB-4.0-5.0(RES)	OCDF	0.158 ng/Kg	0.158U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.563 ng/Kg	0.563U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.185 ng/Kg	0.185U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0573 ng/Kg	0.0573U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0328 ng/Kg	0.0328U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0998 ng/Kg	0.0998U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0652 ng/Kg	0.0652U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0882 ng/Kg	0.0882U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0538 ng/Kg	0.0538U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0576 ng/Kg	0.0576U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0734 ng/Kg	0.0734U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.124 ng/Kg	0.124U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0981 ng/Kg	0.0981U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.113 ng/Kg	0.113U ng/Kg
SL-022-SA8N-SB-9.0-10.0(RES)	OCDF	0.302 ng/Kg	0.302U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.462 ng/Kg	0.462U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.201 ng/Kg	0.201U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.132 ng/Kg	0.132U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0649 ng/Kg	0.0649U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0918 ng/Kg	0.0918U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.139 ng/Kg	0.139U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0916 ng/Kg	0.0916U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.324 ng/Kg	0.324U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0938 ng/Kg	0.0938U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.137 ng/Kg	0.137U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.129 ng/Kg	0.129U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0615 ng/Kg	0.0615U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	OCDD	1.66 ng/Kg	1.66U ng/Kg
SL-023-SA8N-SB-4.0-5.0(RES)	OCDF	0.280 ng/Kg	0.280U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.471 ng/Kg	0.471U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0814 ng/Kg	0.0814U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0723 ng/Kg	0.0723U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.140 ng/Kg	0.140U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0996 ng/Kg	0.0996U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0649 ng/Kg	0.0649U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0565 ng/Kg	0.0565U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0821 ng/Kg	0.0821U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0339 ng/Kg	0.0339U ng/Kg
SL-023-SA8N-SB-9.0-10.0(RES)	OCDF	0.866 ng/Kg	0.866U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.303 ng/Kg	0.303U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.164 ng/Kg	0.164U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0680 ng/Kg	0.0680U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.144 ng/Kg	0.144U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.136 ng/Kg	0.136U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.359 ng/Kg	0.359U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.148 ng/Kg	0.148U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.181 ng/Kg	0.181U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0367 ng/Kg	0.0367U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	OCDD	0.991 ng/Kg	0.991U ng/Kg
SL-050-SA8N-SB-4.0-5.0(RES)	OCDF	0.182 ng/Kg	0.182U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.216 ng/Kg	0.216U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.148 ng/Kg	0.148U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0766 ng/Kg	0.0766U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0727 ng/Kg	0.0727U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.179 ng/Kg	0.179U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0691 ng/Kg	0.0691U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0791 ng/Kg	0.0791U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.172 ng/Kg	0.172U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.109 ng/Kg	0.109U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.221 ng/Kg	0.221U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0622 ng/Kg	0.0622U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	OCDD	0.467 ng/Kg	0.467U ng/Kg
SL-050-SA8N-SB-9.0-10.0(RES)	OCDF	0.172 ng/Kg	0.172U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDD	0.547 ng/Kg	0.547U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,6,7,8-HPCDF	0.350 ng/Kg	0.350U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8,9-HPCDF	0.101 ng/Kg	0.101U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,4,7,8-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDD	0.144 ng/Kg	0.144U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,6,7,8-HXCDF	0.186 ng/Kg	0.186U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDD	0.152 ng/Kg	0.152U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	1,2,3,7,8,9-HXCDF	0.200 ng/Kg	0.200U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	2,3,4,6,7,8-HXCDF	0.201 ng/Kg	0.201U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	2,3,4,7,8-PECDF	0.252 ng/Kg	0.252U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	2,3,7,8-TCDD	0.0527 ng/Kg	0.0527U ng/Kg
SL-064-SA5A-SB-3.0-4.0(RES)	OCDF	0.365 ng/Kg	0.365U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	0.439 ng/Kg	0.439U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.267 ng/Kg	0.267U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.166 ng/Kg	0.166U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

The following samples and their listed target analytes were qualified due to contamination reported in this blank

Sample ID	Analyte	Reported Result	Modified Final Result
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.253 ng/Kg	0.253U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.256 ng/Kg	0.256U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.356 ng/Kg	0.356U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.204 ng/Kg	0.204U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.321 ng/Kg	0.321U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.131 ng/Kg	0.131U ng/Kg
SL-166-SA5A-SS-0.0-0.5(RES)	OCDF	0.375 ng/Kg	0.375U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.423 ng/Kg	0.423U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.406 ng/Kg	0.406U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.301 ng/Kg	0.301U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.225 ng/Kg	0.225U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.422 ng/Kg	0.422U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.299 ng/Kg	0.299U ng/Kg
SL-253-SA5A-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0454 ng/Kg	0.0454U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDD	0.272 ng/Kg	0.272U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.145 ng/Kg	0.145U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0477 ng/Kg	0.0477U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.0525 ng/Kg	0.0525U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDD	0.0351 ng/Kg	0.0351U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0322 ng/Kg	0.0322U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.0304 ng/Kg	0.0304U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0317 ng/Kg	0.0317U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.0629 ng/Kg	0.0629U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0447 ng/Kg	0.0447U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	OCDD	0.921 ng/Kg	0.921U ng/Kg
SL-253-SA5A-SB-8.0-9.0(RES)	OCDF	0.196 ng/Kg	0.196U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
MOISTURE	10.8	10.6	2		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-064-SA5A-SB-3.0-4.0	DUP16-SA5A-QC-042211			
1,2,3,4,6,7,8-HPCDD	0.547	0.433	23	50.00	
OCDD	3.90	2.65	38	50.00	No Qualifiers Applied
OCDF	0.365	0.249	38	50.00	
1,2,3,4,6,7,8-HPCDF	0.350	0.153	78	50.00	
1,2,3,4,7,8,9-HPCDF	0.101	0.0584	53	50.00	
1,2,3,4,7,8-HxCDD	0.119	5.48 U	200	50.00	
1,2,3,4,7,8-HXCDF	0.217	0.0468	129	50.00	
1,2,3,6,7,8-HXCDD	0.144	0.0419	110	50.00	
1,2,3,6,7,8-HXCDF	0.186	0.0346	137	50.00	
1,2,3,7,8,9-HXCDD	0.152	0.0614	85	50.00	J(all detects)
1,2,3,7,8,9-HXCDF	0.200	0.0892	77	50.00	UJ(all non-detects)
1,2,3,7,8-PECDD	0.238	0.0219	166	50.00	
1,2,3,7,8-PECDF	0.234	0.0338	150	50.00	
2,3,4,6,7,8-HXCDF	0.201	0.0601	108	50.00	
2,3,4,7,8-PECDF	0.252	0.0695	114	50.00	
2,3,7,8-TCDD	0.0527	0.0267	65	50.00	
2,3,7,8-TCDF	0.0441	1.10 U	200	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP16-SA5A-QC-042211	1,2,3,4,6,7,8-HPCDD	JBQ	0.433	5.48	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.153	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0584	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0468	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0419	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0346	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0614	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0892	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0219	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0338	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0601	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0695	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0267	1.10	PQL	ng/Kg	
	OCDD	JB	2.65	11.0	PQL	ng/Kg	
	OCDF	JBQ	0.249	11.0	PQL	ng/Kg	
SL-007-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.305	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.248	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0634	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0236	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0674	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0196	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0576	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0413	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0689	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0404	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0397	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0857	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0851	5.73	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0222	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0162	1.15	PQL	ng/Kg	
	OCDD	JB	0.851	11.5	PQL	ng/Kg	
	OCDF	JB	0.209	11.5	PQL	ng/Kg	
SL-007-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.205	5.71	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.125	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0440	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0263	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0141	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0293	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0309	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0386	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0279	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0234	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0430	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0642	5.71	PQL	ng/Kg	
	OCDD	JB	0.446	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.136	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.209	5.76	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.229	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0483	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0135	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0614	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0211	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0373	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.0168	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0118	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0709	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0750	5.76	PQL	ng/Kg	
	OCDD	JB	0.530	11.5	PQL	ng/Kg	
	OCDF	JB	0.191	11.5	PQL	ng/Kg	
SL-010-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.225	5.81	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.233	5.81	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0351	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0152	5.81	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0555	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0203	5.81	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0368	5.81	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.0244	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0160	5.81	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0153	5.81	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0725	5.81	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0696	5.81	PQL	ng/Kg	
	OCDD	JB	0.528	11.6	PQL	ng/Kg	
	OCDF	JBQ	0.197	11.6	PQL	ng/Kg	
SL-011-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.316	5.71	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.185	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0556	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0147	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0477	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0175	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0386	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0355	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0252	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0817	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0703	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0174	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0173	1.14	PQL	ng/Kg	
	OCDD	JB	1.22	11.4	PQL	ng/Kg	
	OCDF	JBQ	0.214	11.4	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.285	5.59	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.263	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0646	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0601	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.123	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0710	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.105	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0728	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0838	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0782	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0789	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.127	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.138	5.59	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0191	1.12	PQL	ng/Kg	
	OCDD	JBQ	0.929	11.2	PQL	ng/Kg	
	OCDF	JB	0.260	11.2	PQL	ng/Kg	
SL-012-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.275	5.85	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.127	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0449	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0240	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0416	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.112	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0354	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.189	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.287	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0500	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0411	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0594	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0678	5.85	PQL	ng/Kg	
	OCDD	JBQ	0.670	11.7	PQL	ng/Kg	
	OCDF	JB	0.141	11.7	PQL	ng/Kg	
SL-022-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.305	5.56	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.125	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0493	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0453	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0897	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0252	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.163	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.300	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0354	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0788	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0621	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0584	5.56	PQL	ng/Kg	
	OCDD	JB	0.992	11.1	PQL	ng/Kg	
	OCDF	JBQ	0.158	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.563	5.85	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.185	5.85	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0573	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0328	5.85	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0998	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0652	5.85	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0882	5.85	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0538	5.85	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0576	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0734	5.85	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.124	5.85	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0981	5.85	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.113	5.85	PQL	ng/Kg	
	OCDD	JB	3.07	11.7	PQL	ng/Kg	
	OCDF	JB	0.302	11.7	PQL	ng/Kg	
SL-023-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.462	5.89	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.201	5.89	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.132	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0649	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0918	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.139	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0916	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.224	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.324	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0938	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.137	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.105	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.129	5.89	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0615	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0180	1.18	PQL	ng/Kg	
	OCDD	JB	1.66	11.8	PQL	ng/Kg	
	OCDF	JB	0.280	11.8	PQL	ng/Kg	
SL-023-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	3.65	5.90	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.471	5.90	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.105	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0923	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0814	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.211	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0723	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.140	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0996	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0649	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0565	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.103	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0821	5.90	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0339	1.18	PQL	ng/Kg	
	OCDF	JBQ	0.866	11.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-050-SA8N-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.303	5.72	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.164	5.72	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0680	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0825	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.144	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.192	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.136	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.261	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.359	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.148	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.222	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.134	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.181	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0367	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0521	1.14	PQL	ng/Kg	
	OCDD	JB	0.991	11.4	PQL	ng/Kg	
	OCDF	JB	0.182	11.4	PQL	ng/Kg	
SL-050-SA8N-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.216	5.90	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.148	5.90	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0766	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0727	5.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.179	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0691	5.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.120	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0791	5.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.139	5.90	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.172	5.90	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.214	5.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.109	5.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.221	5.90	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0622	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0575	1.18	PQL	ng/Kg	
	OCDD	JB	0.467	11.8	PQL	ng/Kg	
	OCDF	JB	0.172	11.8	PQL	ng/Kg	
SL-064-SA5A-SB-3.0-4.0	1,2,3,4,6,7,8-HPCDD	JB	0.547	5.44	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.350	5.44	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.101	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.119	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.217	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.144	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.186	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.152	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.200	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.238	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.234	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.201	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.252	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0527	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0441	1.09	PQL	ng/Kg	
	OCDD	JB	3.90	10.9	PQL	ng/Kg	
	OCDF	JB	0.365	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX077 **Laboratory: LL**

EDD Filename: DX077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-166-SA5A-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	0.439	5.05	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.267	5.05	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.166	5.05	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	5.05	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.253	5.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.203	5.05	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.256	5.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.251	5.05	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.356	5.05	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.311	5.05	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.339	5.05	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.204	5.05	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.321	5.05	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.131	1.01	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0875	1.01	PQL	ng/Kg	
	OCDD	JB	2.28	10.1	PQL	ng/Kg	
	OCDF	JB	0.375	10.1	PQL	ng/Kg	
SL-253-SA5A-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	4.82	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.423	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.320	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.406	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.696	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.301	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.500	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.225	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.226	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.237	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.422	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.299	5.76	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0454	1.15	PQL	ng/Kg	
SL-253-SA5A-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	0.272	5.55	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.145	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0477	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0525	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0351	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0322	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0355	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0304	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0317	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0629	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0447	5.55	PQL	ng/Kg	
	OCDD	JBQ	0.921	11.1	PQL	ng/Kg	
	OCDF	JB	0.196	11.1	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX078

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
29-Apr-2011	SL-040-SA8N-SB-4.0-5.0	6272845	N	METHOD	1613B	IV
29-Apr-2011	SL-040-SA8N-SB-4.0-5.0MS	6272846	MS	METHOD	1613B	IV
29-Apr-2011	SL-040-SA8N-SB-4.0-5.0MSD	6272847	MSD	METHOD	1613B	IV
29-Apr-2011	SL-040-SA8N-SB-9.0-10.0	6272848	N	METHOD	1613B	IV
29-Apr-2011	DUP06-SA8N-QC-042911	6272840	FD	METHOD	1613B	IV
29-Apr-2011	SL-049-SA8N-SB-4.0-5.0	6272849	N	METHOD	1613B	IV
29-Apr-2011	SL-049-SA8N-SB-8.0-9.0	6272850	N	METHOD	1613B	IV
29-Apr-2011	SL-013-SA8N-SB-2.0-3.0	6272841	N	METHOD	1613B	IV
29-Apr-2011	SL-014-SA8N-SB-4.0-5.0	6272842	N	METHOD	1613B	IV
29-Apr-2011	SL-017-SA8N-SB-4.0-5.0	6272843	N	METHOD	1613B	IV
29-Apr-2011	SL-017-SA8N-SB-7.0-8.0	6272844	N	METHOD	1613B	IV

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
IV = EPA Level 4 Data Validation *FD = Field Duplicate* *FB = Field Blank* *MSD = Matrix Spike Duplicate*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX078 **Laboratory: LL**

EDD Filename: DX078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: **DUP06-SA8N-QC-042911** ***Collected:*** **4/29/2011 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,4,6,7,8-HPCDD	0.469	JB	0.0296	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.111	JB	0.0132	MDL	5.95	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.0465	JBQ	0.0205	MDL	5.95	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0233	U	0.0233	MDL	5.95	PQL	ng/Kg	UJ	FD
1,2,3,4,7,8-HXCDF	0.0247	JBQ	0.0171	MDL	5.95	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.104	JBQ	0.0245	MDL	5.95	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDF	0.0155	U	0.0155	MDL	5.95	PQL	ng/Kg	UJ	FD
1,2,3,7,8,9-HXCDD	0.253	JB	0.0236	MDL	5.95	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.403	JB	0.0187	MDL	5.95	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0498	JB	0.0242	MDL	5.95	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0643	JBQ	0.0122	MDL	5.95	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0531	JBQ	0.0165	MDL	5.95	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.0763	JB	0.0125	MDL	5.95	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0248	U	0.0248	MDL	1.19	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0177	U	0.0177	MDL	1.19	PQL	ng/Kg	UJ	FD
OCDD	1.78	JB	0.0459	MDL	11.9	PQL	ng/Kg	U	B
OCDF	0.195	JB	0.0335	MDL	11.9	PQL	ng/Kg	U	B

Sample ID: **SL-013-SA8N-SB-2.0-3.0** ***Collected:*** **4/29/2011 12:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,3,4,6,7,8-HPCDD	4.59	JB	0.0898	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.598	JB	0.0244	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0577	JBQ	0.0457	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.629	JB	0.0340	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.165	JBQ	0.0338	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0974	JQ	0.0300	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.115	JB	0.0326	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0981	JB	0.0432	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0413	JB	0.0263	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.380	JB	0.0282	MDL	5.65	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0733	JB	0.0325	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.156	JB	0.0302	MDL	5.65	PQL	ng/Kg	U	B
OCDF	1.11	JB	0.0433	MDL	11.3	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX078 **Laboratory: LL**

EDD Filename: DX078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-014-SA8N-SB-4.0-5.0 *Collected:* 4/29/2011 2:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.231	JBQ	0.0238	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.0807	JBQ	0.00928	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0394	JBQ	0.0172	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0193	JBQ	0.0152	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0188	JBQ	0.0121	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0288	JBQ	0.0157	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0340	JQ	0.0102	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0294	JBQ	0.0140	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0290	JBQ	0.0208	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0323	JBQ	0.0109	MDL	5.69	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0556	JBQ	0.0120	MDL	5.69	PQL	ng/Kg	U	B
OCDD	0.803	JB	0.0339	MDL	11.4	PQL	ng/Kg	U	B
OCDF	0.132	JBQ	0.0338	MDL	11.4	PQL	ng/Kg	U	B

Sample ID: SL-017-SA8N-SB-4.0-5.0 *Collected:* 4/29/2011 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.474	JB	0.0342	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.136	JB	0.0121	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0352	JBQ	0.0225	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0416	JBQ	0.0155	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0262	JBQ	0.0216	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0214	JQ	0.0129	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.0308	JBQ	0.0207	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0594	JBQ	0.0183	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0221	JBQ	0.0147	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0811	JBQ	0.0134	MDL	5.38	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0848	JB	0.0164	MDL	5.38	PQL	ng/Kg	U	B
OCDD	2.29	JB	0.0560	MDL	10.8	PQL	ng/Kg	J	Z
OCDF	0.234	JBQ	0.0355	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-017-SA8N-SB-7.0-8.0 *Collected:* 4/29/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.181	JB	0.0206	MDL	5.65	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX078 **Laboratory: LL**

EDD Filename: DX078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-017-SA8N-SB-7.0-8.0 *Collected:* 4/29/2011 3:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	0.0860	JB	0.00958	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0276	JBQ	0.0165	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0386	JB	0.0104	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0293	JQ	0.00888	MDL	5.65	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0411	JBQ	0.0113	MDL	5.65	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0260	JBQ	0.0103	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0265	JBQ	0.00993	MDL	5.65	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0541	JBQ	0.0117	MDL	5.65	PQL	ng/Kg	U	B
OCDD	0.468	JBQ	0.0277	MDL	11.3	PQL	ng/Kg	U	B
OCDF	0.0900	JBQ	0.0264	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-040-SA8N-SB-4.0-5.0 *Collected:* 4/29/2011 9:15:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.502	JBQ	0.0346	MDL	5.94	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.186	JB	0.0158	MDL	5.94	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8,9-HPCDF	0.128	JB	0.0273	MDL	5.94	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.138	JB	0.0253	MDL	5.94	PQL	ng/Kg	J	Z, FD
1,2,3,4,7,8-HXCDF	0.194	JBQ	0.0265	MDL	5.94	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.180	JBQ	0.0268	MDL	5.94	PQL	ng/Kg	J	Z, FD
1,2,3,6,7,8-HXCDF	0.196	JQ	0.0224	MDL	5.94	PQL	ng/Kg	J	Z, FD
1,2,3,7,8,9-HXCDD	0.303	JBQ	0.0260	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.457	JB	0.0285	MDL	5.94	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.269	JB	0.0286	MDL	5.94	PQL	ng/Kg	J	Z, FD
1,2,3,7,8-PECDF	0.299	JB	0.0165	MDL	5.94	PQL	ng/Kg	J	Z, FD
2,3,4,6,7,8-HXCDF	0.170	JB	0.0296	MDL	5.94	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.308	JB	0.0219	MDL	5.94	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDD	0.0422	JBQ	0.0257	MDL	1.19	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0498	JBQ	0.0285	MDL	1.19	PQL	ng/Kg	UJ	B, FD
OCDD	2.43	JB	0.0564	MDL	11.9	PQL	ng/Kg	J	Z
OCDF	0.293	JBQ	0.0388	MDL	11.9	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX078 **Laboratory: LL**

EDD Filename: DX078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-040-SA8N-SB-9.0-10.0 *Collected:* 4/29/2011 9:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.631	JB	0.0355	MDL	6.05	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.227	JB	0.0137	MDL	6.05	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.120	JB	0.0223	MDL	6.05	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.178	JB	0.0218	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.188	JB	0.0268	MDL	6.05	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.157	JB	0.0233	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.207	J	0.0233	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.143	JBQ	0.0230	MDL	6.05	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.227	JBQ	0.0284	MDL	6.05	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.328	JB	0.0251	MDL	6.05	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.351	JB	0.0151	MDL	6.05	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.183	JBQ	0.0252	MDL	6.05	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.321	JB	0.0159	MDL	6.05	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.112	JB	0.0220	MDL	1.21	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.120	JB	0.0193	MDL	1.21	PQL	ng/Kg	U	B
OCDD	3.80	JB	0.0454	MDL	12.1	PQL	ng/Kg	J	Z
OCDF	0.314	JBQ	0.0332	MDL	12.1	PQL	ng/Kg	U	B

Sample ID: SL-049-SA8N-SB-4.0-5.0 *Collected:* 4/29/2011 11:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.321	JB	0.0219	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.150	JB	0.00910	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0729	JB	0.0203	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0681	JB	0.0153	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.110	JBQ	0.0156	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0738	JB	0.0163	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0713	J	0.0122	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.0766	JB	0.0156	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0986	JBQ	0.0190	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.118	JB	0.0174	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.143	JB	0.0111	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0830	JB	0.0139	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.152	JBQ	0.0128	MDL	5.58	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX078 **Laboratory: LL**

EDD Filename: DX078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-049-SA8N-SB-4.0-5.0 *Collected:* 4/29/2011 11:19:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDD	0.0416	JBQ	0.0193	MDL	1.12	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0529	JBQ	0.0189	MDL	1.12	PQL	ng/Kg	U	B
OCDD	1.60	JB	0.0367	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.318	JB	0.0325	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-049-SA8N-SB-8.0-9.0 *Collected:* 4/29/2011 11:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDD	0.232	JB	0.0177	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.111	JBQ	0.00796	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0793	JBQ	0.0196	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0350	JBQ	0.0148	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0831	JB	0.0141	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0457	JBQ	0.0158	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0484	JQ	0.0105	MDL	5.80	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.0489	JBQ	0.0151	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0937	JB	0.0169	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.102	JB	0.0197	MDL	5.80	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.124	JBQ	0.0109	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0906	JBQ	0.0122	MDL	5.80	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.131	JB	0.0118	MDL	5.80	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0475	JBQ	0.0182	MDL	1.16	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0322	JB	0.0159	MDL	1.16	PQL	ng/Kg	U	B
OCDD	0.478	JB	0.0248	MDL	11.6	PQL	ng/Kg	U	B
OCDF	0.214	JBQ	0.0305	MDL	11.6	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-008-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX078 **Laboratory: LL**

EDD Filename: DX078_v1 **eQAPP Name: CDM_SSFL_110509**

Reason Code Legend

Reason Code	*Description*
	Duplicate Sample Count = 0
	Duplicate Sample Count > 1
	Illogical Fraction
	Laboratory Control Sample Count = 0
	Laboratory Control Sample Count > 1
	Matrix Spike Sample Count = 0
	Matrix Spike Sample Count > 1
	Method Blank Sample Count = 0
	Method Blank Sample Count > 1
	Percent Moisture
	Sampling to Leaching Estimation
	Sampling to Leaching Rejection
*#	Professional Judgment
A	ICP Serial Dilution
B	Calibration Blank Contamination
B	Method Blank Contamination
C	Continuing Calibration Verification Correlation Coefficient
C	Continuing Calibration Verification Percent Difference Lower Estimation
C	Continuing Calibration Verification Percent Difference Lower Rejection
C	Continuing Calibration Verification Percent Difference Upper Estimation
C	Continuing Calibration Verification Percent Difference Upper Rejection
C	Continuing Calibration Verification Percent Recovery Lower Estimation
C	Continuing Calibration Verification Percent Recovery Lower Rejection
C	Continuing Calibration Verification Percent Recovery Upper Estimation
C	Continuing Calibration Verification Percent Recovery Upper Rejection
C	Continuing Calibration Verification Relative Response Factor
C	Initial Calibration Correlation Coefficient
C	Initial Calibration Percent Relative Standard Deviation
C	Initial Calibration Relative Response Factor
C	Initial Calibration Verification Correlation Coefficient

* denotes a non-reportable result