Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Jan-2011	EB20-SA5B-011311	6183558	EB	3020A	6020	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	3510C	8082	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	3510C	8270C	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	3510C	8270C SIM	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	Gen Prep	300.0	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	Gen Prep	314.0	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	Gen Prep	7199	III
13-Jan-2011	EB20-SA5B-011311	6183558	EB	METHOD	7470A	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	3050B	6010B	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	3050B	6020	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	3060A	7199	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	3550B	8082	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	3550B	8270C	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	3550B	8270C SIM	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	5035	8260B	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	5035	8260B SIM	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	Gen Prep	9045M	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	METHOD	300.0	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	METHOD	314.0	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	N	METHOD	6850	III
13-Jan-2011	SL-122-SA5B-SB-2.0-3.0	6183557	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: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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	2.0		1.1	MDL	1.4	PQL	mg/Kg	J	Q

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	64.0	J	48.8	MDL	131	PQL	mg/Kg	J	Z
TIN	2.74	J	1.31	MDL	13.1	PQL	mg/Kg	J	Z

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 11:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	65.7	J	51.3	MDL	138	PQL	mg/Kg	J	Z
TIN	2.53	J	1.38	MDL	13.8	PQL	mg/Kg	J	Z
Zirconium	2.10	J	1.16	MDL	6.88	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.41	J	1.10	MDL	11.0	PQL	mg/Kg	J	Z
Zirconium	1.25	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.00	J	1.12	MDL	11.2	PQL	mg/Kg	J	Z
Zirconium	1.66	J	0.937	MDL	5.58	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory:** LL

EDD Filename: PrepDE060_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.21	J	1.13	MDL	11.3	PQL	mg/Kg	J	Z
Zirconium	2.53	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.82	J	1.10	MDL	11.0	PQL	mg/Kg	J	Z
Zirconium	1.43	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 11:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	106	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.59	J	1.09	MDL	10.9	PQL	mg/Kg	J	Z
Zirconium	1.69	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	68.0	J	39.9	MDL	107	PQL	mg/Kg	J	Z
TIN	2.15	J	1.07	MDL	10.7	PQL	mg/Kg	J	Z
Zirconium	1.92	J	0.899	MDL	5.35	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.08	J	1.26	MDL	12.6	PQL	mg/Kg	J	Z
Zirconium	1.83	J	1.06	MDL	6.30	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.33	J	1.12	MDL	11.2	PQL	mg/Kg	J	Z
Zirconium	2.49	J	0.945	MDL	5.62	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.01	J	1.11	MDL	11.1	PQL	mg/Kg	J	Z
Zirconium	2.28	J	0.933	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.48	J	1.14	MDL	11.4	PQL	mg/Kg	J	Z
Zirconium	1.79	J	0.955	MDL	5.69	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.118	J	0.0761	MDL	0.254	PQL	mg/Kg	J	Z
SILVER	0.0798	J	0.0152	MDL	0.127	PQL	mg/Kg	J	Z

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.179	J	0.0508	MDL	0.508	PQL	mg/Kg	J	Z

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
SILVER	0.0370	J	0.0167	MDL	0.139	PQL	mg/Kg	J	Z

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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	0.124	J	0.0555	MDL	0.555	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory:** LL

EDD Filename: PrepDE060_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0698	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.195	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z
SILVER	0.0588	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.121	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.108	J	0.0676	MDL	0.225	PQL	mg/Kg	J	Z
CADMIUM	0.0458	J	0.0450	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0987	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 11:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.141	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z
CADMIUM	0.0802	J	0.0422	MDL	0.106	PQL	mg/Kg	J	Z
SILVER	0.0158	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 11:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.121	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0839	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z
CADMIUM	0.0657	J	0.0428	MDL	0.107	PQL	mg/Kg	J	Z
SILVER	0.0157	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0779	MDL	0.260	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0697	J	0.0519	MDL	0.519	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.185	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z
CADMIUM	0.106	J	0.0446	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0181	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.381	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.152	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z
SILVER	0.0540	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0836	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0737	J	0.0682	MDL	0.227	PQL	mg/Kg	J	Z
CADMIUM	0.0663	J	0.0455	MDL	0.114	PQL	mg/Kg	J	Z
SILVER	0.106	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix: AQ**

Sample ID: EB20-SA5B-011311 *Collected:* 1/13/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	R	H

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: AQ**

Sample ID: EB21-SA5B-011311 *Collected:* 1/13/2011 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	5.0	U	5.0	MDL	10.0	PQL	ug/L	R	H

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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	0.29	J	0.28	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *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

Sample ID: SL-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 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
HEXAVALENT CHROMIUM	0.86	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.26	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 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
HEXAVALENT CHROMIUM	0.25	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7470A **Matrix: AQ**

Sample ID: EB20-SA5B-011311 *Collected:* 1/13/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.000050	U	0.000050	MDL	0.00020	PQL	mg/L	UJ	L

Sample ID: EB21-SA5B-011311 *Collected:* 1/13/2011 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
MERCURY	0.000050	U	0.000050	MDL	0.00020	PQL	mg/L	UJ	L

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
MERCURY	0.0220	J	0.0036	MDL	0.127	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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	0.0904	J	0.0040	MDL	0.140	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0054	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0218	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 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
MERCURY	0.0050	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0077	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0477	J	0.0036	MDL	0.126	PQL	mg/Kg	J	Z

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0056	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0056	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory:** LL

EDD Filename: PrepDE060_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.34	U	0.34	MDL	0.44	PQL	ug/Kg	UJ	S
4,4'-DDE	1.5	U	1.5	MDL	1.5	PQL	ug/Kg	UJ	S
4,4'-DDT	1.9	U	1.9	MDL	1.9	PQL	ug/Kg	UJ	S
ALDRIN	0.086	U	0.086	MDL	0.22	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.044	U	0.044	MDL	0.22	PQL	ug/Kg	UJ	S
BETA-BHC	0.078	U	0.078	MDL	0.22	PQL	ug/Kg	UJ	S
Chlordane	3.0	U	3.0	MDL	4.4	PQL	ug/Kg	UJ	S
DELTA-BHC	0.047	U	0.047	MDL	0.22	PQL	ug/Kg	UJ	S
DIELDRIN	0.086	U	0.086	MDL	0.44	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.058	U	0.058	MDL	0.22	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.34	U	0.34	MDL	0.44	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.086	U	0.086	MDL	0.44	PQL	ug/Kg	UJ	S
ENDRIN	0.086	U	0.086	MDL	0.44	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.54	U	0.54	MDL	0.54	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.38	U	0.38	MDL	0.44	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.044	U	0.044	MDL	0.22	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.26	U	0.26	MDL	0.26	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.044	U	0.044	MDL	0.22	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.44	U	0.44	MDL	2.2	PQL	ug/Kg	UJ	S
MIREX	0.086	U	0.086	MDL	0.44	PQL	ug/Kg	UJ	S
TOXAPHENE	2.9	U	2.9	MDL	8.6	PQL	ug/Kg	UJ	S

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: EB20-SA5B-011311 *Collected:* 1/13/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L
Aroclor 5442	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L
Aroclor 5460	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: EB21-SA5B-011311 *Collected:* 1/13/2011 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	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L
Aroclor 5442	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L
Aroclor 5460	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.7		0.43	MDL	2.2	PQL	ug/Kg	J	S
AROCLOR 1260	3.3		0.43	MDL	2.2	PQL	ug/Kg	J	S
Aroclor 5432	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5442	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5460	3.0	J	1.3	MDL	4.3	PQL	ug/Kg	J	Z, S, L

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
AROCLOR 1254	1.5	J	0.47	MDL	2.4	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.4	U	1.4	MDL	4.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.4	U	1.4	MDL	4.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.4	U	1.4	MDL	4.7	PQL	ug/Kg	UJ	L

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *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	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory:** LL

EDD Filename: PrepDE060_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *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	L
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
2,4-DB	3.5	U	3.5	MDL	3.5	PQL	ug/Kg	R	Q
DINOSEB	1.0	U	1.0	MDL	3.1	PQL	ug/Kg	R	L
MCPP	340	U	340	MDL	340	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
DINOSEB	1.1	U	1.1	MDL	3.4	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB20-SA5B-011311 *Collected:* 1/13/2011 1:00:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	16	PQL	ug/L	UJ	E

Sample ID: EB21-SA5B-011311 *Collected:* 1/13/2011 11:55:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	16	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *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	39	J	22	MDL	440	PQL	ug/Kg	U	B

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	24	MDL	470	PQL	ug/Kg	U	B

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	19	MDL	380	PQL	ug/Kg	U	B
Di-n-octylphthalate	26	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *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-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *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	21	J	20	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *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	32	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 11:25:00 *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	23	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *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	20	J	18	MDL	360	PQL	ug/Kg	U	B

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *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	22	J	22	MDL	430	PQL	ug/Kg	U	B

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *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	30	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 9:45:00 *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	21	J	19	MDL	370	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *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	48	J	19	MDL	390	PQL	ug/Kg	U	B

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB20-SA5B-011311 *Collected:* 1/13/2011 1:00:00 *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	0.27	J	0.058	MDL	1.2	PQL	ug/L	U	B
Diethylphthalate	0.15	J	0.058	MDL	1.2	PQL	ug/L	J	Z
Di-n-butylphthalate	0.62	J	0.058	MDL	1.2	PQL	ug/L	J	Z
NAPHTHALENE	0.059		0.012	MDL	0.058	PQL	ug/L	U	B
N-NITROSODIMETHYLAMINE	0.012	U	0.012	MDL	0.058	PQL	ug/L	UJ	L

Sample ID: EB21-SA5B-011311 *Collected:* 1/13/2011 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
Diethylphthalate	0.15	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.57	J	0.051	MDL	1.0	PQL	ug/L	J	Z
NAPHTHALENE	0.029	J	0.010	MDL	0.051	PQL	ug/L	U	B
N-NITROSODIMETHYLAMINE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L

Method Category: SVOA

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

Sample ID: SED-009-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 9:45:00 *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(G,H,I)PERYLENE	1.5	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	7.8	MDL	24	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SED-028-SIV-SD-0.0-0.5 *Collected:* 1/13/2011 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
BENZO(A)PYRENE	1.4	J	0.94	MDL	2.4	PQL	ug/Kg	J	Z
CHRYSENE	0.93	J	0.47	MDL	2.4	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.94	MDL	2.4	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.94	MDL	2.4	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.94	MDL	2.4	PQL	ug/Kg	J	Z

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.9	J	7.0	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-074-SA5B-SB-7.0-8.0 *Collected:* 1/13/2011 11:16:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.8	J	7.1	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.3	J	6.8	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.0	J	6.6	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.0	J	6.5	MDL	19	PQL	ug/Kg	U	B

Sample ID: SL-121-SA5B-SB-9.0-10 *Collected:* 1/13/2011 10:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	9.8	J	7.8	MDL	23	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.7	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-301-SA5B-SB-7.5-8.5 *Collected:* 1/13/2011 9:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-octylphthalate	8.6	J	7.0	MDL	21	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-073-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 12:31:00 *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	0.57	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-074-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 11:11:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.63	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-119-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 8:53:00 *Analysis Type:* RES *Dilution:* 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.70	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: SL-120-SA5B-SB-3.0-4.0 *Collected:* 1/13/2011 11:25:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.91	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-121-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 10:22:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.77	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-122-SA5B-SB-2.0-3.0 *Collected:* 1/13/2011 1:39:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.28	MDL	4.7	PQL	ug/Kg	U	B

Sample ID: SL-301-SA5B-SB-4.0-5.0 *Collected:* 1/13/2011 9:45:00 *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	0.45	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: PrepDE060_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE060

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE060 **Laboratory: LL**
EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB20-SA5B-011311 (RES)	Sampling To Analysis	142.00	24.00	HOURS	J (all detects)
EB21-SA5B-011311 (RES)		145.00	24.00	HOURS	R (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P01908AB221920	1/21/2011 7:20:00 PM	PHOSPHORUS	1.36 mg/Kg	SED-009-SIV-SD-0.0-0.5 SED-028-SIV-SD-0.0-0.5 SL-073-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-7.0-8.0 SL-119-SA5B-SB-3.0-4.0 SL-120-SA5B-SB-3.0-4.0 SL-121-SA5B-SB-4.0-5.0 SL-121-SA5B-SB-9.0-10 SL-122-SA5B-SB-2.0-3.0 SL-301-SA5B-SB-4.0-5.0 SL-301-SA5B-SB-7.5-8.5

Method: **8151A**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P19197AB240253A	1/22/2011 2:53:00 AM	MCPP	97 ug/Kg	SED-009-SIV-SD-0.0-0.5 SED-028-SIV-SD-0.0-0.5

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB50B211951A	1/17/2011 7:51:00 PM	METHYLENE CHLORIDE TOLUENE	0.76 ug/Kg 0.32 ug/Kg	SL-073-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-4.0-5.0 SL-119-SA5B-SB-3.0-4.0 SL-120-SA5B-SB-3.0-4.0 SL-121-SA5B-SB-4.0-5.0 SL-122-SA5B-SB-2.0-3.0 SL-301-SA5B-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-073-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.4U ug/Kg
SL-074-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	3.9U ug/Kg
SL-074-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.9U ug/Kg
SL-119-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.70 ug/Kg	4.6U ug/Kg
SL-119-SA5B-SB-3.0-4.0(RES)	TOLUENE	0.1 ug/Kg	4.6U ug/Kg
SL-120-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.91 ug/Kg	4.3U ug/Kg
SL-120-SA5B-SB-3.0-4.0(RES)	TOLUENE	0.1 ug/Kg	4.3U ug/Kg
SL-121-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.77 ug/Kg	3.9U ug/Kg
SL-121-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.12 ug/Kg	3.9U ug/Kg
SL-122-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.7U ug/Kg
SL-301-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.9U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA01B262110	1/21/2011 9:10:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	SED-009-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-073-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-7.0-8.0 SL-119-SA5B-SB-3.0-4.0 SL-120-SA5B-SB-3.0-4.0 SL-121-SA5B-SB-4.0-5.0 SL-121-SA5B-SB-9.0-10 SL-122-SA5B-SB-2.0-3.0 SL-301-SA5B-SB-4.0-5.0 SL-301-SA5B-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
SED-009-SIV-SD-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	39 ug/Kg	440U ug/Kg
SED-028-SIV-SD-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	35 ug/Kg	470U ug/Kg
SL-073-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	38 ug/Kg	380U ug/Kg
SL-074-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg
SL-074-SA5B-SB-7.0-8.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	390U ug/Kg
SL-119-SA5B-SB-3.0-4.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	32 ug/Kg	380U ug/Kg
SL-120-SA5B-SB-3.0-4.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	23 ug/Kg	370U ug/Kg
SL-121-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	360U ug/Kg
SL-121-SA5B-SB-9.0-10(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	430U ug/Kg
SL-122-SA5B-SB-2.0-3.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	390U ug/Kg
SL-301-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	370U ug/Kg
SL-301-SA5B-SB-7.5-8.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	48 ug/Kg	390U ug/Kg

Method: **8270C SIM**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWD01B262021	1/20/2011 8:21:00 PM	1-METHYLNAPHTHALENE	0.032 ug/L	EB20-SA5B-011311
		2-METHYLNAPHTHALENE	0.054 ug/L	EB21-SA5B-011311
		ACENAPHTHENE	0.035 ug/L	
		ANTHRACENE	0.014 ug/L	
		BENZO(A)ANTHRACENE	0.017 ug/L	
		BENZO(A)PYRENE	0.014 ug/L	
		BENZO(B)FLUORANTHENE	0.017 ug/L	
		BENZO(G,H,I)PERYLENE	0.016 ug/L	
		BENZO(K)FLUORANTHENE	0.020 ug/L	
		BIS(2-ETHYLHEXYL)PHTHALATE	0.094 ug/L	
		CHRYSENE	0.020 ug/L	
		DIBENZO(A,H)ANTHRACENE	0.015 ug/L	
		Di-n-butylphthalate	0.057 ug/L	
		FLUORANTHENE	0.022 ug/L	
		FLUORENE	0.038 ug/L	
		INDENO(1,2,3-CD)PYRENE	0.016 ug/L	
		NAPHTHALENE	0.35 ug/L	
		PHENANTHRENE	0.046 ug/L	
		PYRENE	0.017 ug/L	

Method Blank Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
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
EB20-SA5B-011311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.27 ug/L	1.2U ug/L
EB20-SA5B-011311(RES)	NAPHTHALENE	0.059 ug/L	0.059U ug/L
EB21-SA5B-011311(RES)	NAPHTHALENE	0.029 ug/L	0.051U ug/L

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB02B260832	1/25/2011 8:32:00 AM	Di-n-octylphthalate	7.7 ug/Kg	SED-009-SIV-SD-0.0-0.5 SED-028-SIV-SD-0.0-0.5 SL-073-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-4.0-5.0 SL-074-SA5B-SB-7.0-8.0 SL-119-SA5B-SB-3.0-4.0 SL-120-SA5B-SB-3.0-4.0 SL-121-SA5B-SB-4.0-5.0 SL-121-SA5B-SB-9.0-10 SL-122-SA5B-SB-2.0-3.0 SL-301-SA5B-SB-4.0-5.0 SL-301-SA5B-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-074-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	8.9 ug/Kg	21U ug/Kg
SL-074-SA5B-SB-7.0-8.0(RES)	Di-n-octylphthalate	8.8 ug/Kg	21U ug/Kg
SL-119-SA5B-SB-3.0-4.0(RES)	Di-n-octylphthalate	8.3 ug/Kg	20U ug/Kg
SL-120-SA5B-SB-3.0-4.0(RES)	Di-n-octylphthalate	8.0 ug/Kg	20U ug/Kg
SL-121-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	8.0 ug/Kg	19U ug/Kg
SL-121-SA5B-SB-9.0-10(RES)	Di-n-octylphthalate	9.8 ug/Kg	23U ug/Kg
SL-301-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	8.7 ug/Kg	20U ug/Kg
SL-301-SA5B-SB-7.5-8.5(RES)	Di-n-octylphthalate	8.6 ug/Kg	21U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE060 | Laboratory: LL

EDD Filename: DE060_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-073-SA5B-SB-4.0-5.0MS SL-073-SA5B-SB-4.0-5.0MSD (SL-073-SA5B-SB-4.0-5.0)	BENZIDINE	27	33	35.00-141.00	-	BENZIDINE	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
SED-028-SIV-SD-0.0-0.5MS (SED-028-SIV-SD-0.0-0.5 SL-122-SA5B-SB-2.0-3.0)	FLUORIDE	79	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-009-SIV-SD-0.0-0.5MSD (SED-009-SIV-SD-0.0-0.5)	2,4,5-T 2,4-D DICAMBA	- - -	- - 159	25.00-132.00 28.00-161.00 33.00-120.00	47 (35.00) 45 (35.00) -	2,4,5-T 2,4-D DICAMBA	J(all detects)
SED-009-SIV-SD-0.0-0.5MS SED-009-SIV-SD-0.0-0.5MSD (SED-009-SIV-SD-0.0-0.5)	2,4-DB MCPP	- 0	0 0	20.00-170.00 16.00-174.00	200 (50.00) -	2,4-DB MCPP	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-028-SIV-SD-0.0-0.5DUP (SED-028-SIV-SD-0.0-0.5 SL -122-SA5B-SB-2.0-3.0)	FLUORIDE	31	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7470A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P01713CY220905 (EB20-SA5B-011311 EB21-SA5B-011311)	MERCURY	-	89	90.00-115.00	-	MERCURY	J (all detects) UJ (all non-detects)

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WDLCSQ262054 P7WDLCSY262127 (EB20-SA5B-011311 EB21-SA5B-011311)	BENZO(A)PYRENE BENZO(K)FLUORANTHENE INDENO(1,2,3-CD)PYRENE	117 126 -	117 124 126	64.00-115.00 72.00-122.00 69.00-124.00	- - -	BENZO(A)PYRENE BENZO(K)FLUORANTHENE INDENO(1,2,3-CD)PYRENE	J(all detects)
P7WDLCSQ262054 P7WDLCSY262127 (EB20-SA5B-011311 EB21-SA5B-011311)	N-NITROSODIMETHYLAMINE	63	63	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8WALCSY260812 (EB20-SA5B-011311 EB21-SA5B-011311)	BENZOIC ACID	-	-	10.00-69.00	52 (30.00)	BENZOIC ACID	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10186AQ242213A (EB20-SA5B-011311 EB21-SA5B-011311)	AROCLOR 1260	136	-	56.00-135.00	-	AROCLOR 1242, 1248, 1254, 1260	J(all detects)
P10186AQ242308A P10186AY242250A (EB20-SA5B-011311 EB21-SA5B-011311)	Aroclor 5442	44	46	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_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
P01926AQ221548A (SED-009-SIV-SD-0.0-0.5 SED -028-SIV-SD-0.0-0.5 SL -073-SA5B-SB-4.0-5.0 SL -074-SA5B-SB-4.0-5.0 SL -074-SA5B-SB-7.0-8.0 SL -119-SA5B-SB-3.0-4.0 SL -120-SA5B-SB-3.0-4.0 SL -121-SA5B-SB-4.0-5.0 SL -121-SA5B-SB-9.0-10 SL -122-SA5B-SB-2.0-3.0 SL -301-SA5B-SB-4.0-5.0 SL -301-SA5B-SB-7.5-8.5)	ANTIMONY	134	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10170AQ241623A P10170AY241604A (SED-009-SIV-SD-0.0-0.5 SED -028-SIV-SD-0.0-0.5 SL -073-SA5B-SB-4.0-5.0 SL -074-SA5B-SB-4.0-5.0 SL -074-SA5B-SB-7.0-8.0 SL -119-SA5B-SB-3.0-4.0 SL -120-SA5B-SB-3.0-4.0 SL -121-SA5B-SB-4.0-5.0 SL -121-SA5B-SB-9.0-10 SL -122-SA5B-SB-2.0-3.0 SL -301-SA5B-SB-4.0-5.0 SL -301-SA5B-SB-7.5-8.5)	Aroclor 5442	67	65	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10197AQ240320A (SED-009-SIV-SD-0.0-0.5 SED -028-SIV-SD-0.0-0.5)	DINOSEB	5	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-009-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	36	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-009-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	146	45.00-120.00	All Target Analytes	J(all detects)
SED-028-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	152	45.00-120.00	All Target Analytes	J(all detects)
SL-074-SA5B-SB-7.0-8.0	DECACHLOROBIPHENYL	138	45.00-120.00	All Target Analytes	J(all detects)
SL-119-SA5B-SB-3.0-4.0	DECACHLOROBIPHENYL	135	45.00-120.00	All Target Analytes	J(all detects)
SL-120-SA5B-SB-3.0-4.0	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	J(all detects)
SL-121-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	J(all detects)
SL-122-SA5B-SB-2.0-3.0	DECACHLOROBIPHENYL	140	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB21-SA5B-011311	Nitrobenzene-d5	131	40.00-130.00	No Affected Compounds	No Qual, One Out

Reporting Limit Outliers

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB20-SA5B-011311	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.27	1.2	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.15	1.2	PQL	ug/L	
	Di-n-butylphthalate	J	0.62	1.2	PQL	ug/L	
EB21-SA5B-011311	Diethylphthalate	J	0.15	1.0	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.57	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.029	0.051	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-009-SIV-SD-0.0-0.5	SODIUM	J	64.0	131	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	13.1	PQL	mg/Kg	
SED-028-SIV-SD-0.0-0.5	SODIUM	J	65.7	138	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	13.8	PQL	mg/Kg	
	Zirconium	J	2.10	6.88	PQL	mg/Kg	
SL-073-SA5B-SB-4.0-5.0	TIN	J	3.41	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.25	5.49	PQL	mg/Kg	
SL-074-SA5B-SB-4.0-5.0	TIN	J	3.00	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.66	5.58	PQL	mg/Kg	
SL-074-SA5B-SB-7.0-8.0	TIN	J	3.21	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.53	5.67	PQL	mg/Kg	
SL-119-SA5B-SB-3.0-4.0	TIN	J	2.82	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.43	5.52	PQL	mg/Kg	
SL-120-SA5B-SB-3.0-4.0	SODIUM	J	106	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.59	10.9	PQL	mg/Kg	
	Zirconium	J	1.69	5.43	PQL	mg/Kg	
SL-121-SA5B-SB-4.0-5.0	SODIUM	J	68.0	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.15	10.7	PQL	mg/Kg	
	Zirconium	J	1.92	5.35	PQL	mg/Kg	
SL-121-SA5B-SB-9.0-10	TIN	J	3.08	12.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.83	6.30	PQL	mg/Kg	
SL-122-SA5B-SB-2.0-3.0	TIN	J	3.33	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.49	5.62	PQL	mg/Kg	
SL-301-SA5B-SB-4.0-5.0	TIN	J	3.01	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.28	5.56	PQL	mg/Kg	
SL-301-SA5B-SB-7.5-8.5	TIN	J	2.48	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.79	5.69	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-009-SIV-SD-0.0-0.5	ANTIMONY	J	0.118	0.254	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.179	0.508	PQL	mg/Kg	
	SILVER	J	0.0798	0.127	PQL	mg/Kg	
SED-028-SIV-SD-0.0-0.5	SELENIUM	J	0.124	0.555	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0370	0.139	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-073-SA5B-SB-4.0-5.0	SELENIUM	J	0.149	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0698	0.110	PQL	mg/Kg	
SL-074-SA5B-SB-4.0-5.0	ANTIMONY	J	0.195	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.121	0.446	PQL	mg/Kg	
	SILVER	J	0.0588	0.112	PQL	mg/Kg	
SL-074-SA5B-SB-7.0-8.0	SELENIUM	J	0.135	0.454	PQL	mg/Kg	J (all detects)
SL-119-SA5B-SB-3.0-4.0	ANTIMONY	J	0.108	0.225	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0458	0.113	PQL	mg/Kg	
	SELENIUM	J	0.0987	0.450	PQL	mg/Kg	
SL-120-SA5B-SB-3.0-4.0	ANTIMONY	J	0.141	0.211	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0802	0.106	PQL	mg/Kg	
	SELENIUM	J	0.121	0.422	PQL	mg/Kg	
	SILVER	J	0.0158	0.106	PQL	mg/Kg	
SL-121-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0839	0.214	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0657	0.107	PQL	mg/Kg	
	SELENIUM	J	0.117	0.428	PQL	mg/Kg	
	SILVER	J	0.0157	0.107	PQL	mg/Kg	
SL-121-SA5B-SB-9.0-10	ANTIMONY	J	0.145	0.260	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0697	0.519	PQL	mg/Kg	
SL-122-SA5B-SB-2.0-3.0	ANTIMONY	J	0.185	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.106	0.111	PQL	mg/Kg	
	SELENIUM	J	0.381	0.446	PQL	mg/Kg	
	SILVER	J	0.0181	0.111	PQL	mg/Kg	
SL-301-SA5B-SB-4.0-5.0	ANTIMONY	J	0.152	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0836	0.432	PQL	mg/Kg	
	SILVER	J	0.0540	0.108	PQL	mg/Kg	
SL-301-SA5B-SB-7.5-8.5	ANTIMONY	J	0.0737	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0663	0.114	PQL	mg/Kg	
	SILVER	J	0.106	0.114	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-028-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.4	PQL	mg/Kg	J (all detects)
SL-073-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.57	1.1	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.2	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.54	1.2	PQL	mg/Kg	J (all detects)
SL-120-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.86	1.1	PQL	mg/Kg	J (all detects)
SL-121-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.49	1.3	PQL	mg/Kg	J (all detects)
SL-122-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-301-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)
SL-301-SA5B-SB-7.5-8.5	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-009-SIV-SD-0.0-0.5	MERCURY	J	0.0220	0.127	PQL	mg/Kg	J (all detects)
SED-028-SIV-SD-0.0-0.5	MERCURY	J	0.0904	0.140	PQL	mg/Kg	J (all detects)
SL-073-SA5B-SB-4.0-5.0	MERCURY	J	0.0054	0.107	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SB-7.0-8.0	MERCURY	J	0.0218	0.112	PQL	mg/Kg	J (all detects)
SL-120-SA5B-SB-3.0-4.0	MERCURY	J	0.0050	0.106	PQL	mg/Kg	J (all detects)
SL-121-SA5B-SB-4.0-5.0	MERCURY	J	0.0077	0.105	PQL	mg/Kg	J (all detects)
SL-121-SA5B-SB-9.0-10	MERCURY	J	0.0477	0.126	PQL	mg/Kg	J (all detects)
SL-122-SA5B-SB-2.0-3.0	MERCURY	J	0.0056	0.112	PQL	mg/Kg	J (all detects)
SL-301-SA5B-SB-7.5-8.5	MERCURY	J	0.0056	0.115	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-009-SIV-SD-0.0-0.5	Aroclor 5460	J	3.0	4.3	PQL	ug/Kg	J (all detects)
SED-028-SIV-SD-0.0-0.5	AROCLOR 1254	J	1.5	2.4	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-073-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.57	4.4	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.63 0.08	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-119-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE TOLUENE	J J	0.70 0.1	4.6 4.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-120-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE TOLUENE	J J	0.91 0.1	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-121-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.77 0.12	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-122-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	1.4	4.7	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.45	3.9	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-009-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	440	PQL	ug/Kg	J (all detects)
SED-028-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	470	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE060 **Laboratory: LL**

EDD Filename: DE060_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-073-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	380	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	26	190	PQL	ug/Kg	
SL-074-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	390	PQL	ug/Kg	J (all detects)
SL-119-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	380	PQL	ug/Kg	J (all detects)
SL-120-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	370	PQL	ug/Kg	J (all detects)
SL-121-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-121-SA5B-SB-9.0-10	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	430	PQL	ug/Kg	J (all detects)
SL-122-SA5B-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	390	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SB-7.5-8.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-009-SIV-SD-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.5	2.2	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	11	24	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	2.2	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	2.2	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.2	PQL	ug/Kg	
SED-028-SIV-SD-0.0-0.5	BENZO(A)PYRENE	J	1.4	2.4	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.93	2.4	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	2.4	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	2.4	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	2.4	PQL	ug/Kg	
SL-074-SA5B-SB-4.0-5.0	Di-n-octylphthalate	J	8.9	21	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SB-7.0-8.0	Di-n-octylphthalate	J	8.8	21	PQL	ug/Kg	J (all detects)
SL-119-SA5B-SB-3.0-4.0	Di-n-octylphthalate	J	8.3	20	PQL	ug/Kg	J (all detects)
SL-120-SA5B-SB-3.0-4.0	Di-n-octylphthalate	J	8.0	20	PQL	ug/Kg	J (all detects)
SL-121-SA5B-SB-4.0-5.0	Di-n-octylphthalate	J	8.0	19	PQL	ug/Kg	J (all detects)
SL-121-SA5B-SB-9.0-10	Di-n-octylphthalate	J	9.8	23	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SB-4.0-5.0	Di-n-octylphthalate	J	8.7	20	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SB-7.5-8.5	Di-n-octylphthalate	J	8.6	21	PQL	ug/Kg	J (all detects)

LDC #: 25550H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/6/11
SDG #: DE060 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
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~~	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	Client specified
VII.	Duplicate Sample Analysis	N	↓
VIII.	Laboratory Control Samples (LCS)	N	LCS/D
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	N	Not performed
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=13, 14

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-073-SA5B-SB-4.0-5.0	11	SED-028-SIV-SD-0.0-0.5	21		31	
2	SL-301-SA5B-SB-4.0-5.0	12	SL-122-SA5B-SB-2.0-3.0	22		32	
3	SL-301-SA5B-SB-7.5-8.5	13	EB20-SA5B-011311	23		33	
4	SL-074-SA5B-SB-4.0-5.0	14	EB21-SA5B-011311	24		34	
5	SL-074-SA5B-SB-7.0-8.0	15		25		35	
6	SL-121-SA5B-SB-4.0-5.0	16		26		36	
7	SL-121-SA5B-SB-9.0-10.0	17		27		37	
8	SL-120-SA5B-SB-30-4.0	18		28		38	
9	SL-119-SA5B-SB-3.0-4.0	19		29		39	
10	SED-009-SIV-SD-0.0-0.5	20		30		40	

Notes:

LDC #: 25550 4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: V

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-14		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

LDC #: 25550H4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x ICPMS (2dil)
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Reason: B

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
Sb			0.33	0.33	0.31	0.15	0.074	0.20		0.084	0.15	0.14	0.11	0.12		0.18
Zr			5.1	2.55	1.3	2.3	1.8	1.7	2.5	1.9	1.8	1.7	1.4		2.1	2.5

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.

SAMPLE DELIVERY GROUP

DE061

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-Jan-2011	TB-011411	6184385	TB	5030B	8015M	III
14-Jan-2011	TB-011411	6184385	TB	5030B	8260B	III
14-Jan-2011	TB-011411	6184385	TB	5030B	8260B SIM	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	3050B	6010B	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	3050B	6020	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	3060A	7199	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	3550B	8082	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	3550B	8270C	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	3550B	8270C SIM	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	5035	8260B	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	5035	8260B SIM	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	Gen Prep	9045M	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	METHOD	300.0	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	METHOD	314.0	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0	6184376	N	METHOD	7471A	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0DUP	P184376D270441A	DUP	METHOD	314.0	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0DUP	P184376D271603A	DUP	METHOD	300.0	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0MSD	P184376M262033	MSD	3550B	8270C	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0MS	P184376R261959	MS	3550B	8270C	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0MS	P184376R270504A	MS	METHOD	314.0	III
14-Jan-2011	SL-124-SA5B-SB-4.0-5.0MS	P184376R271618A	MS	METHOD	300.0	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	3050B	6010B	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	3050B	6020	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	3060A	7199	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	3550B	8082	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	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
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	3550B	8270C SIM	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	Gen Prep	9045M	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	METHOD	300.0	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	METHOD	314.0	III
14-Jan-2011	SL-124-SA5B-SB-7.5-8.5	6184377	N	METHOD	7471A	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	3050B	6010B	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	3050B	6020	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	3060A	7199	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	3550B	8082	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	3550B	8270C	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	3550B	8270C SIM	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	5035	8260B	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	5035	8260B SIM	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	Gen Prep	9045M	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	METHOD	300.0	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	METHOD	314.0	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0	6184379	N	METHOD	7471A	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0DUP	P184379D271223B	DUP	METHOD	314.0	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0DUP	P184379D290915A	DUP	Gen Prep	9045M	III
14-Jan-2011	SL-128-SA5B-SB-4.0-5.0MS	P184379R271246B	MS	METHOD	314.0	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	3050B	6010B	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	3050B	6020	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	3060A	7199	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	3550B	8082	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	3550B	8270C	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	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
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	5035	8260B	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	5035	8260B SIM	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	Gen Prep	9045M	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	METHOD	300.0	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	METHOD	314.0	III
14-Jan-2011	SL-126-SA5B-SB-2.0-3.0	6184378	N	METHOD	7471A	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	3510C	8015B	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	3510C	8015M	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	3520C	1625C	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	5030B	8015M	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	8330	8330A	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	Gen Prep	300.0	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	Gen Prep	8015B	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	Gen Prep	8015M	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	Gen Prep	9040B	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	METHOD	8315A	III
14-Jan-2011	EB22-SA5B-011411	6184375	EB	METHOD	9012B	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	3050B	6010B	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	3050B	6020	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	3060A	7199	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	3550B	8082	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	3550B	8270C	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	3550B	8270C SIM	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	5035	8260B	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	5035	8260B SIM	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	Gen Prep	9045M	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
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	METHOD	300.0	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	METHOD	314.0	III
14-Jan-2011	SL-129-SA5B-SB-2.0-3.0	6184381	N	METHOD	7471A	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	3050B	6010B	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	3050B	6020	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	3060A	7199	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	3550B	8082	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	3550B	8270C	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	3550B	8270C SIM	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	5035	8260B	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	5035	8260B SIM	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	Gen Prep	9045M	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	METHOD	300.0	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	METHOD	314.0	III
14-Jan-2011	SL-083-SA5B-SB-4.0-5.0	6184382	N	METHOD	7471A	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	3050B	6010B	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	3050B	6020	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	3060A	7199	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	3550B	8082	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	3550B	8270C	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	3550B	8270C SIM	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	5035	8260B	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	5035	8260B SIM	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	Gen Prep	9045M	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	METHOD	300.0	III
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	METHOD	314.0	III

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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
14-Jan-2011	SL-125-SA5B-SB-4.0-5.0	6184380	N	METHOD	7471A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3050B	6010B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3050B	6020	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3060A	7199	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3546	1625C	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3550B	8015B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3550B	8015M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3550B	8082	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3550B	8270C	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	3550B	8270C SIM	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	5035	8015M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	5035	8260B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	5035	8260B SIM	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	8330	8330A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	Gen Prep	9045M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	300.0	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	314.0	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	7471A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	8015B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	8015M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	8315A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5	6184383	N	METHOD	9012B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5DUP	P184383D271953A	DUP	METHOD	9012B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M241719A	MSD	8330	8330A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M242245A	MSD	METHOD	8315A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M261212	MSD	3546	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
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M320325A	MSD	3550B	8015M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M320349A	MSD	METHOD	8015B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M321824A	MSD	3550B	8015B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MSD	P184383M321959A	MSD	METHOD	8015M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R241637A	MS	8330	8330A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R242235A	MS	METHOD	8315A	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R261155	MS	3546	1625C	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R271954A	MS	METHOD	9012B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R320300A	MS	3550B	8015M	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R320335A	MS	METHOD	8015B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R321739A	MS	3550B	8015B	III
14-Jan-2011	SL-081-SA5B-SB-2.5-3.5MS	P184383R321942A	MS	METHOD	8015M	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3050B	6010B	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3050B	6020	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3060A	7199	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3546	1625C	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3550B	8015B	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3550B	8015M	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3550B	8082	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3550B	8270C	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	3550B	8270C SIM	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	5035	8015M	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	5035	8260B	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	5035	8260B SIM	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	8330	8330A	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	Gen Prep	9045M	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
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	METHOD	300.0	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	METHOD	314.0	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	METHOD	7471A	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	METHOD	8015B	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	METHOD	8015M	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	N	METHOD	8315A	III
14-Jan-2011	SL-081-SA5B-SB-6.0-7.0	6184384	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: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: EM **Method:** 9040B **Matrix:** AQ

Sample ID: EB22-SA5B-011411 *Collected:* 1/14/2011 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
PH	6.2		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM **Method:** 300.0 **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 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
FLUORIDE	5.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-125-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 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	2.0		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-126-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 11:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.33	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	307		0.0860	MDL	0.551	PQL	mg/Kg	J	E
PHOSPHORUS	151		0.618	MDL	11.0	PQL	mg/Kg	J	Q
TIN	2.58	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.75	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.03	J	0.986	MDL	5.54	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 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
MANGANESE	259		0.0864	MDL	0.554	PQL	mg/Kg	J	E
PHOSPHORUS	145		0.621	MDL	11.1	PQL	mg/Kg	J	Q
TIN	2.71	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.10	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.51	J	0.972	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	360		0.0852	MDL	0.546	PQL	mg/Kg	J	E
PHOSPHORUS	334		0.611	MDL	10.9	PQL	mg/Kg	J	Q
TIN	2.69	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.60	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.76	J	0.986	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	396		0.0864	MDL	0.554	PQL	mg/Kg	J	E
PHOSPHORUS	282		0.621	MDL	11.1	PQL	mg/Kg	J	Q
TIN	2.61	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.84	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.27	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory:** LL

EDD Filename: DE061_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	181		0.0880	MDL	0.564	PQL	mg/Kg	J	E
PHOSPHORUS	278		0.632	MDL	11.3	PQL	mg/Kg	J	Q
TIN	2.68	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.98	J	0.948	MDL	5.64	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 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
MANGANESE	264		0.0852	MDL	0.546	PQL	mg/Kg	J	E
PHOSPHORUS	369		0.611	MDL	10.9	PQL	mg/Kg	J	Q
TIN	2.57	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.91	J	0.917	MDL	5.46	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 11:28:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.23	J	0.934	MDL	5.25	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 11:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	436		0.0819	MDL	0.525	PQL	mg/Kg	J	E
PHOSPHORUS	741		0.588	MDL	10.5	PQL	mg/Kg	J	Q
TIN	2.91	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.83	J	0.997	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	300		0.0874	MDL	0.560	PQL	mg/Kg	J	E
PHOSPHORUS	297		0.628	MDL	11.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory:** LL

EDD Filename: DE061_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.97	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.13	J	0.941	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	227		0.0812	MDL	0.520	PQL	mg/Kg	J	E
PHOSPHORUS	493		0.583	MDL	10.4	PQL	mg/Kg	J	Q
SODIUM	103	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.26	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	43.5		0.0243	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0662	MDL	0.221	PQL	mg/Kg	J	Z, E, Q, Q
BERYLLIUM	0.716		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	24.0		0.132	MDL	0.441	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.2		0.0728	MDL	0.441	PQL	mg/Kg	J	Q
SILVER	0.0333	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	51.9		0.618	MDL	3.31	PQL	mg/Kg	J	Q

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	43.7		0.0241	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0878	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.119	MDL	0.439	PQL	mg/Kg	J	E

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0838	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, E, Q, Q
BERYLLIUM	0.722		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	22.0		0.132	MDL	0.439	PQL	mg/Kg	J	Q
COPPER	9.24		0.0724	MDL	0.439	PQL	mg/Kg	J	Q
SILVER	0.0389	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	51.9		0.615	MDL	3.29	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	50.5		0.0245	MDL	0.111	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0825	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.120	MDL	0.445	PQL	mg/Kg	J	E

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.138	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, E, Q, Q
BERYLLIUM	0.918		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	27.9		0.134	MDL	0.445	PQL	mg/Kg	J	Q
COPPER	15.9		0.0735	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0796	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	70.1		0.624	MDL	3.34	PQL	mg/Kg	J	Q

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	53.6		0.0249	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0835	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.122	MDL	0.452	PQL	mg/Kg	J	E

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.129	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, E, Q, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.08		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.0698	J	0.0452	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	30.2		0.136	MDL	0.452	PQL	mg/Kg	J	Q
COPPER	13.3		0.0746	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0551	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	76.8		0.633	MDL	3.39	PQL	mg/Kg	J	Q

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	48.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0475	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	89.5		0.121	MDL	0.447	PQL	mg/Kg	J	E

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.119	J	0.0670	MDL	0.223	PQL	mg/Kg	J	Z, E, Q, Q
BERYLLIUM	0.777		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	25.8		0.134	MDL	0.447	PQL	mg/Kg	J	Q
COPPER	14.6		0.0737	MDL	0.447	PQL	mg/Kg	J	Q
ZINC	59.3		0.626	MDL	3.35	PQL	mg/Kg	J	Q

Sample ID: SL-125-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 2:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	37.6		0.0240	MDL	0.109	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-125-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 2:20:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 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
BARIUM	57.3		0.118	MDL	0.437	PQL	mg/Kg	J	E

Sample ID: SL-125-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 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
ANTIMONY	0.100	J	0.0655	MDL	0.218	PQL	mg/Kg	J	Z, E, Q, Q
BERYLLIUM	0.444		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	20.3		0.131	MDL	0.437	PQL	mg/Kg	J	Q
COPPER	7.21		0.0721	MDL	0.437	PQL	mg/Kg	J	Q
SILVER	0.0190	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
ZINC	43.0		0.611	MDL	3.28	PQL	mg/Kg	J	Q

Sample ID: SL-126-SA5B-SB-2.0-3.0 **Collected:** 1/14/2011 11:28:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	61.8		0.0229	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-126-SA5B-SB-2.0-3.0 **Collected:** 1/14/2011 11:28:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.299	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SB-2.0-3.0 **Collected:** 1/14/2011 11:28:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.112	MDL	0.416	PQL	mg/Kg	J	E

Sample ID: SL-126-SA5B-SB-2.0-3.0 **Collected:** 1/14/2011 11:28:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.361		0.0624	MDL	0.208	PQL	mg/Kg	J	E, Q, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-126-SA5B-SB-2.0-3.0 **Collected:** 1/14/2011 11:28:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BERYLLIUM	1.01		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.0859	J	0.0416	MDL	0.104	PQL	mg/Kg	J	Z
CHROMIUM	36.1		0.125	MDL	0.416	PQL	mg/Kg	J	Q
COPPER	29.4		0.0686	MDL	0.416	PQL	mg/Kg	J	Q
SILVER	0.0172	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
ZINC	102		0.582	MDL	3.12	PQL	mg/Kg	J	Q

Sample ID: SL-128-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 10:29:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	51.6		0.0244	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-128-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 10:29:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0811	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 10:29:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.120	MDL	0.444	PQL	mg/Kg	J	E

Sample ID: SL-128-SA5B-SB-4.0-5.0 **Collected:** 1/14/2011 10:29:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0666	MDL	0.222	PQL	mg/Kg	J	Z, E, Q, Q
BERYLLIUM	0.948		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COPPER	14.2		0.0733	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0945	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	62.6		0.622	MDL	3.33	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 Matrix: SO

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	2.68		0.0707	MDL	0.429	PQL	mg/Kg	J	Q
VANADIUM	11.8		0.0236	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	22.5		0.116	MDL	0.429	PQL	mg/Kg	J	E

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0643	U	0.0643	MDL	0.214	PQL	mg/Kg	R	Q
BERYLLIUM	0.116		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	5.33		0.129	MDL	0.429	PQL	mg/Kg	J	Q
THALLIUM	0.0958	J	0.0321	MDL	0.107	PQL	mg/Kg	J	Z
ZINC	18.4		0.600	MDL	3.21	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 Matrix: SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 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
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 Matrix: SO

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.23	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-125-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 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
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *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	0.22	MDL	1.1	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 1625C Matrix: AQ

Sample ID: EB22-SA5B-011411 *Collected:* 1/14/2011 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
N-NITROSODIMETHYLAMINE	1.16		0.496	MDL	0.991	PQL	ng/L	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory:** LL

EDD Filename: DE061_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *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	2090		18.8	MDL	37.5	PQL	ng/Kg	J	Q

Method Category: SVOA

Method: 8015M **Matrix:** AQ

Sample ID: TB-011411 *Collected:* 1/14/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	20	U	20	MDL	50	PQL	ug/L	UJ	S

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *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)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *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	1.6	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *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 1248	1.2	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L
Di-n-octylphthalate	180	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Sample ID: SL-124-SA5B-SB-7.5-8.5 *Collected:* 1/14/2011 9:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-125-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-126-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 11:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

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

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *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	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8315A **Matrix:** AQ

Sample ID: EB22-SA5B-011411 *Collected:* 1/14/2011 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
FORMALDEHYDE	24	J	10	MDL	50	PQL	ug/L	U	B

Method Category: SVOA **Method:** 8315A **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	14000		1300	MDL	3400	PQL	ug/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *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-DINITROBENZENE	94	J	46	MDL	140	PQL	ug/Kg	J	Z, S

Method Category: VOA **Method:** 8015B **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	170	J	110	MDL	560	PQL	ug/Kg	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-081-SA5B-SB-2.5-3.5 *Collected:* 1/14/2011 3:08:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.4	J	6.4	MDL	7.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.98	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-081-SA5B-SB-6.0-7.0 *Collected:* 1/14/2011 3:19:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.2	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-083-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 1:23:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-124-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 9:22:00 *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	1.6	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-125-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 2:20:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.47	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-126-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 11:28:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.56	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-128-SA5B-SB-4.0-5.0 *Collected:* 1/14/2011 10:29:00 *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	1.9	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-129-SA5B-SB-2.0-3.0 *Collected:* 1/14/2011 1:18:00 *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	0.97	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE061

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9040B **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB22-SA5B-011411 (RES)	Sampling To Analysis	105.00	48.00	HOURS	J (all detects) R (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWD01B262133	1/29/2011 9:33:00 PM	N-NITROSODIMETHYLAMINE	0.736 ng/L	EB22-SA5B-011411

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
EB22-SA5B-011411(RES)	N-NITROSODIMETHYLAMINE	1.16 ng/L	1.16U ng/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P01708AB220525	1/18/2011 5:25:00 AM	CALCIUM IRON PHOSPHORUS TIN	10.2 mg/Kg 4.79 mg/Kg 1.38 mg/Kg 1.18 mg/Kg	SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-7.5-8.5 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0

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-081-SA5B-SB-2.5-3.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-081-SA5B-SB-6.0-7.0(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-083-SA5B-SB-4.0-5.0(RES)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-124-SA5B-SB-4.0-5.0(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-124-SA5B-SB-7.5-8.5(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-125-SA5B-SB-4.0-5.0(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-126-SA5B-SB-2.0-3.0(RES)	TIN	2.91 mg/Kg	2.91U mg/Kg
SL-128-SA5B-SB-4.0-5.0(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-129-SA5B-SB-2.0-3.0(RES)	TIN	2.26 mg/Kg	2.26U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P01726AB221301A	1/21/2011 1:01:00 PM	COPPER	0.107 mg/Kg	SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-7.5-8.5 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: 7199
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02743AB272127A	1/30/2011 9:27:00 PM	HEXAVALENT CHROMIUM	0.26 mg/Kg	SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-7.5-8.5 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0

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-081-SA5B-SB-2.5-3.5(RES)	HEXAVALENT CHROMIUM	0.39 mg/Kg	0.39U mg/Kg
SL-081-SA5B-SB-6.0-7.0(RES)	HEXAVALENT CHROMIUM	0.50 mg/Kg	0.50U mg/Kg
SL-083-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.31 mg/Kg	0.31U mg/Kg
SL-124-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.32 mg/Kg	0.32U mg/Kg
SL-124-SA5B-SB-7.5-8.5(RES)	HEXAVALENT CHROMIUM	0.30 mg/Kg	0.30U mg/Kg
SL-125-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.34 mg/Kg	0.34U mg/Kg
SL-128-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.31 mg/Kg	0.31U mg/Kg
SL-129-SA5B-SB-2.0-3.0(RES)	HEXAVALENT CHROMIUM	0.41 mg/Kg	0.41U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB50B211951A	1/17/2011 7:51:00 PM	METHYLENE CHLORIDE TOLUENE	0.76 ug/Kg 0.32 ug/Kg	SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0

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-081-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.98 ug/Kg	3.8U ug/Kg
SL-081-SA5B-SB-6.0-7.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	3.7U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_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-083-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	3.7U ug/Kg
SL-124-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	3.9U ug/Kg
SL-125-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	4.2U ug/Kg
SL-126-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.3U ug/Kg
SL-126-SA5B-SB-2.0-3.0(RES)	TOLUENE	0.11 ug/Kg	4.3U ug/Kg
SL-128-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.9 ug/Kg	4.0U ug/Kg
SL-129-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.97 ug/Kg	4.0U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLH01B260718	1/24/2011 7:18:00 AM	Di-n-octylphthalate	7.4 ug/Kg	SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-7.5-8.5 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0

Method: 8315A
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P17171AB241528A	1/18/2011 3:28:00 PM	FORMALDEHYDE	13 ug/L	EB22-SA5B-011411

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
EB22-SA5B-011411(RES)	FORMALDEHYDE	24 ug/L	50U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-081-SA5B-SB-2.5-3.5MS SL-081-SA5B-SB-2.5-3.5MSD (SL-081-SA5B-SB-2.5-3.5)	N-NITROSODIMETHYLAMINE	-148	-150	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J (all detects) R (all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-124-SA5B-SB-4.0-5.0MS SL-124-SA5B-SB-4.0-5.0MSD (SL-124-SA5B-SB-4.0-5.0)	BENZIDINE	15	14	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 314.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-128-SA5B-SB-4.0-5.0MS (SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-125-SA5B-SB-4.0-5.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0)	PERCHLORATE	157	-	80.00-120.00	-	PERCHLORATE	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-124-SA5B-SB-4.0-5.0MS (SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-7.5-8.5 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0)	FLUORIDE	33	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

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

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-081-SA5B-SB-2.5-3.5MS SL-081-SA5B-SB-2.5-3.5MSD (SL-081-SA5B-SB-2.5-3.5)	FORMALDEHYDE	26	11	80.00-120.00	-	FORMALDEHYDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-124-SA5B-SB-4.0-5.0DUP (SL-081-SA5B-SB-2.5-3.5 SL -081-SA5B-SB-6.0-7.0 SL -083-SA5B-SB-4.0-5.0 SL -124-SA5B-SB-4.0-5.0 SL -124-SA5B-SB-7.5-8.5 SL -125-SA5B-SB-4.0-5.0 SL -126-SA5B-SB-2.0-3.0 SL -128-SA5B-SB-4.0-5.0 SL -129-SA5B-SB-2.0-3.0)	FLUORIDE	34	20.00	No Qual OK by difference

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_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
P9LBLCSQ261708 (SL-081-SA5B-SB-2.5-3.5 SL-081-SA5B-SB-6.0-7.0 SL-083-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-4.0-5.0 SL-124-SA5B-SB-7.5-8.5 SL-125-SA5B-SB-4.0-5.0 SL-126-SA5B-SB-2.0-3.0 SL-128-SA5B-SB-4.0-5.0 SL-129-SA5B-SB-2.0-3.0)	3,3'-DICHLOROBENZIDINE	36	-	38.00-105.00	-	3,3'-DICHLOROBENZIDINE	J (all detects) UJ (all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
TB-011411	TRIFLUOROTOLUENE (FID)	71	77.00-119.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-081-SA5B-SB-2.5-3.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J (all detects)
SL-083-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	J(all detects)
SL-124-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	J(all detects)
SL-124-SA5B-SB-7.5-8.5	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
SL-125-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	124	45.00-120.00	All Target Analytes	J(all detects)
SL-126-SA5B-SB-2.0-3.0	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)
SL-128-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	140	45.00-120.00	All Target Analytes	J(all detects)
SL-129-SA5B-SB-2.0-3.0	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)

Method: 8330A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-081-SA5B-SB-6.0-7.0	2-NITRO-M-XYLENE	144	65.00-135.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8315A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB22-SA5B-011411	FORMALDEHYDE	J	24	50	PQL	ug/L	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-2.5-3.5	BORON	J	2.33	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.0	PQL	mg/Kg	
	Zirconium	J	1.75	5.51	PQL	mg/Kg	
SL-081-SA5B-SB-6.0-7.0	BORON	J	2.03	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	11.1	PQL	mg/Kg	
	Zirconium	J	2.10	5.54	PQL	mg/Kg	
SL-083-SA5B-SB-4.0-5.0	BORON	J	1.51	5.46	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	10.9	PQL	mg/Kg	
	Zirconium	J	1.60	5.46	PQL	mg/Kg	
SL-124-SA5B-SB-4.0-5.0	BORON	J	1.76	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	11.1	PQL	mg/Kg	
	Zirconium	J	1.84	5.54	PQL	mg/Kg	
SL-124-SA5B-SB-7.5-8.5	BORON	J	1.27	5.64	PQL	mg/Kg	J (all detects)
	TIN	J	2.68	11.3	PQL	mg/Kg	
	Zirconium	J	1.98	5.64	PQL	mg/Kg	
SL-125-SA5B-SB-4.0-5.0	TIN	J	2.57	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.91	5.46	PQL	mg/Kg	
SL-126-SA5B-SB-2.0-3.0	BORON	J	1.23	5.25	PQL	mg/Kg	J (all detects)
	TIN	J	2.91	10.5	PQL	mg/Kg	
SL-128-SA5B-SB-4.0-5.0	BORON	J	1.83	5.60	PQL	mg/Kg	J (all detects)
	TIN	J	2.97	11.2	PQL	mg/Kg	
	Zirconium	J	2.13	5.60	PQL	mg/Kg	
SL-129-SA5B-SB-2.0-3.0	SODIUM	J	103	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.26	10.4	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-2.5-3.5	ANTIMONY	J	0.142	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.149	0.441	PQL	mg/Kg	
	SILVER	J	0.0333	0.110	PQL	mg/Kg	
SL-081-SA5B-SB-6.0-7.0	ANTIMONY	J	0.0838	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0878	0.439	PQL	mg/Kg	
	SILVER	J	0.0389	0.110	PQL	mg/Kg	
SL-083-SA5B-SB-4.0-5.0	ANTIMONY	J	0.138	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0825	0.445	PQL	mg/Kg	
	SILVER	J	0.0796	0.111	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-124-SA5B-SB-4.0-5.0	ANTIMONY	J	0.129	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0698	0.113	PQL	mg/Kg	
	SELENIUM	J	0.0835	0.452	PQL	mg/Kg	
	SILVER	J	0.0551	0.113	PQL	mg/Kg	
SL-124-SA5B-SB-7.5-8.5	ANTIMONY	J	0.119	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0475	0.447	PQL	mg/Kg	
SL-125-SA5B-SB-4.0-5.0	ANTIMONY	J	0.100	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.136	0.437	PQL	mg/Kg	
	SILVER	J	0.0190	0.109	PQL	mg/Kg	
SL-126-SA5B-SB-2.0-3.0	CADMIUM	J	0.0859	0.104	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.299	0.416	PQL	mg/Kg	
	SILVER	J	0.0172	0.104	PQL	mg/Kg	
SL-128-SA5B-SB-4.0-5.0	ANTIMONY	J	0.105	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0811	0.444	PQL	mg/Kg	
	SILVER	J	0.0945	0.111	PQL	mg/Kg	
SL-129-SA5B-SB-2.0-3.0	THALLIUM	J	0.0958	0.107	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-081-SA5B-SB-6.0-7.0	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-083-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-124-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-124-SA5B-SB-7.5-8.5	HEXAVALENT CHROMIUM	J	0.30	1.2	PQL	mg/Kg	J (all detects)
SL-125-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-128-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.2	PQL	mg/Kg	J (all detects)
SL-129-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-2.5-3.5	METHANOL	J	170	560	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE061 Laboratory: LL

EDD Filename: DE061_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-2.5-3.5	EFH (C21-C30)	J	1.2	1.3	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-6.0-7.0	AROCLOR 1260	J	1.6	1.9	PQL	ug/Kg	J (all detects)
SL-083-SA5B-SB-4.0-5.0	AROCLOR 1248	J	1.2	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-2.5-3.5	ACETONE METHYLENE CHLORIDE	J J	7.4 0.98	7.6 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-081-SA5B-SB-6.0-7.0	METHYLENE CHLORIDE	J	1.2	3.7	PQL	ug/Kg	J (all detects)
SL-083-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	3.7	PQL	ug/Kg	J (all detects)
SL-124-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.6	3.9	PQL	ug/Kg	J (all detects)
SL-125-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.47	4.2	PQL	ug/Kg	J (all detects)
SL-126-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE TOLUENE	J J	0.56 0.11	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-128-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.9	4.0	PQL	ug/Kg	J (all detects)
SL-129-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.97	4.0	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-6.0-7.0	Di-n-octylphthalate	J	180	190	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-081-SA5B-SB-6.0-7.0	BENZO(A)PYRENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE061 **Laboratory: LL**

EDD Filename: DE061_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8330A**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-081-SA5B-SB-6.0-7.0	1,3-DINITROBENZENE	J	94	140	PQL	ug/Kg	J (all detects)

LDC #: 25750L4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/4
SDG #: DE061 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: OR
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	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits - No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE057)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	A	SDG: DE057
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-124-SA5B-SB-4.0-5.0	11		21		31	
2	SL-124-SA5B-SB-7.5-8.5	12		22		32	
3	SL-126-SA5B-SB-2.0-3.0	13		23		33	
4	SL-128-SA5B-SB-4.0-5.0	14		24		34	
5	SL-125-SA5B-SB-4.0-5.0	15		25		35	
6	SL-129-SA5B-SB-2.0-3.0	16		26		36	
7	SL-083-SA5B-SB-4.0-5.0	17		27		37	
8	SL-081-SA5B-SB-2.5-3.5	18		28		38	
9	SL-081-SA5B-SB-6.0-7.0	19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE062

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-Jan-2011	TB-011711	6185294	TB	5030B	8015M	III
17-Jan-2011	TB-011711	6185294	TB	5030B	8260B	III
17-Jan-2011	TB-011711	6185294	TB	5030B	8260B SIM	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3050B	6010B	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3050B	6020	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3060A	7199	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3546	1625C	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3550B	8015B	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3550B	8015M	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3550B	8082	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3550B	8270C	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	3550B	8270C SIM	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	5035	8015M	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	5035	8260B	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	5035	8260B SIM	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	8330	8330A	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	Gen Prep	9045M	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	300.0	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	314.0	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	7471A	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	8015B	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	8015M	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	8315A	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25	6185288	N	METHOD	9012B	III
17-Jan-2011	SL-082-SA5B-SB-2.25-3.25M	P185288R240333A	MS	3550B	8082	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	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
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3050B	6020	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3060A	7199	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3546	1625C	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3550B	8015B	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3550B	8015M	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3550B	8082	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3550B	8270C	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	3550B	8270C SIM	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	5035	8015M	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	5035	8260B	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	5035	8260B SIM	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	8330	8330A	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	Gen Prep	9045M	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	300.0	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	314.0	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	7471A	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	8015B	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	8015M	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	8315A	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0	6185285	N	METHOD	9012B	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0DUP	P185285D271331B	DUP	METHOD	300.0	III
17-Jan-2011	SL-101-SA5B-SB-4.0-5.0MS	P185285R271346B	MS	METHOD	300.0	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3050B	6010B	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3050B	6020	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3060A	7199	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3546	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
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3550B	8015B	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3550B	8015M	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3550B	8082	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3550B	8270C	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	3550B	8270C SIM	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	5035	8015M	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	5035	8260B	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	5035	8260B SIM	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	8330	8330A	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	Gen Prep	9045M	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	300.0	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	314.0	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	7471A	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	8015B	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	8015M	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	8315A	III
17-Jan-2011	SL-082-SA5B-SB-7.0-8.0	6185289	N	METHOD	9012B	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3050B	6010B	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3050B	6020	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3060A	7199	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3546	1625C	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3550B	8015B	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3550B	8015M	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3550B	8082	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	3550B	8270C	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	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
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	5035	8015M	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	5035	8260B	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	5035	8260B SIM	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	8330	8330A	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	Gen Prep	9045M	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	300.0	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	314.0	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	7471A	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	8015B	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	8015M	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	8315A	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5	6185286	N	METHOD	9012B	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5DUP	P185286D272038A	DUP	METHOD	300.0	III
17-Jan-2011	SL-101-SA5B-SB-7.5-8.5MS	P185286R272054A	MS	METHOD	300.0	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3060A	7199	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3546	1625C	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3550B	8015B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3550B	8015M	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3550B	8082	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3550B	8270C	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	3550B	8270C SIM	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	5035	8015M	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	5035	8260B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	8330	8330A	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	Gen Prep	9045M	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	300.0	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	314.0	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	6850	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	7471A	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	8015B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	8015M	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	8315A	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0	6185284	N	METHOD	9012B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D221901	DUP	METHOD	7471A	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D222121	DUP	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D222145A	DUP	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D222145B	DUP	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D222145C	DUP	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D222145D	DUP	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D222256	DUP	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0DUP	P185284D271130A	DUP	METHOD	314.0	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M221904	MSD	METHOD	7471A	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M222129	MSD	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M222151A	MSD	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M222151B	MSD	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M222151C	MSD	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M222151D	MSD	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M222304	MSD	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M240217A	MSD	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
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MSD	P185284M260326	MSD	3550B	8270C SIM	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R212302A	MS	5035	8260B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R221903	MS	METHOD	7471A	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R222125	MS	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R222148A	MS	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R222148B	MS	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R222148C	MS	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R222148D	MS	3050B	6020	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R222300	MS	3050B	6010B	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R240159A	MS	3550B	8082	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R260255	MS	3550B	8270C SIM	III
17-Jan-2011	SL-112-SA5B-SB-4.0-5.0MS	P185284R271153A	MS	METHOD	314.0	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	3050B	6010B	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	3050B	6020	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	3060A	7199	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	3550B	8082	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	3550B	8270C	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	3550B	8270C SIM	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	5035	8260B	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	5035	8260B SIM	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	Gen Prep	9045M	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	METHOD	300.0	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	METHOD	314.0	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0	6185287	N	METHOD	7471A	III
17-Jan-2011	SL-078-SA5B-SB-4.0-5.0DUP	P185287D290915B	DUP	Gen Prep	9045M	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	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
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3050B	6020	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3060A	7199	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3546	1625C	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3550B	8015B	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3550B	8015M	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3550B	8082	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3550B	8270C	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	3550B	8270C SIM	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	5035	8015M	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	5035	8260B	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	5035	8260B SIM	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	8330	8330A	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	Gen Prep	9045M	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	300.0	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	314.0	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	7471A	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	8015B	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	8015M	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	8315A	III
17-Jan-2011	SL-113-SA5B-SB-4.0-5.0	6185292	N	METHOD	9012B	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	3050B	6010B	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	3050B	6020	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	3060A	7199	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	3550B	8082	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	3550B	8270C	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	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
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	5035	8260B	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	5035	8260B SIM	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	Gen Prep	9045M	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	METHOD	300.0	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	METHOD	314.0	III
17-Jan-2011	SL-039-SA5B-SB-4.0-5.0	6185290	N	METHOD	7471A	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	3050B	6010B	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	3050B	6020	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	3060A	7199	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	3550B	8082	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	3550B	8270C	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	3550B	8270C SIM	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	Gen Prep	9045M	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	METHOD	300.0	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	METHOD	314.0	III
17-Jan-2011	SL-039-SA5B-SB-9.0-10.0	6185291	N	METHOD	7471A	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3050B	6010B	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3050B	6020	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3060A	7199	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3546	1625C	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3550B	8015B	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3550B	8015M	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3550B	8082	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3550B	8270C	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	3550B	8270C SIM	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	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
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	5035	8260B	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	5035	8260B SIM	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	8330	8330A	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	Gen Prep	9045M	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	300.0	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	314.0	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	7471A	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	8015B	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	8015M	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	8315A	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0	6185293	N	METHOD	9012B	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0DUP	P185293D270257A	DUP	3060A	7199	III
17-Jan-2011	SL-117-SA5B-SB-4.0-5.0MS	P185293R270226A	MS	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*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.7		0.95	MDL	1.2	PQL	mg/Kg	J	Q, E

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.3		0.95	MDL	1.2	PQL	mg/Kg	J	Q, E

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	3.8		0.93	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 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
FLUORIDE	1.5		0.93	MDL	1.2	PQL	mg/Kg	J	Q, E

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	4.0		0.92	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.92	MDL	1.2	PQL	mg/Kg	J	Q, E

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	7.4		0.92	MDL	1.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory:** LL

EDD Filename: DE062_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	28.6		0.92	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	4.7		0.87	MDL	1.6	PQL	mg/Kg	J	Q

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.0		0.87	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z, Q

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z, Q

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q, E

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.9		0.90	MDL	1.7	PQL	mg/Kg	J	Q

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 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
FLUORIDE	3.1		0.90	MDL	1.1	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	184		0.616	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2150		19.8	MDL	55.0	PQL	mg/Kg	J	Q
TIN	2.32	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.30	J	0.924	MDL	5.50	PQL	mg/Kg	U	B

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	390		0.662	MDL	11.8	PQL	mg/Kg	J	Q
POTASSIUM	4120		21.3	MDL	59.1	PQL	mg/Kg	J	Q
TIN	2.60	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	5.52	J	0.993	MDL	5.91	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	144		0.655	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	1460		21.1	MDL	58.5	PQL	mg/Kg	J	Q
TIN	2.92	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.983	MDL	5.85	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 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
PHOSPHORUS	277		0.644	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	2770		20.7	MDL	57.5	PQL	mg/Kg	J	Q
TIN	2.34	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.98	J	0.966	MDL	5.75	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	197		0.627	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	1630		20.2	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.69	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.03	J	0.941	MDL	5.60	PQL	mg/Kg	U	B

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	110		0.622	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	1640		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	2.58	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.15	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	253		0.593	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1700		19.1	MDL	52.9	PQL	mg/Kg	J	Q
TIN	2.40	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.67	J	0.889	MDL	5.29	PQL	mg/Kg	U	B

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	214		0.591	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2060		19.0	MDL	52.8	PQL	mg/Kg	J	Q
TIN	2.55	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.886	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	389		0.621	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2290		20.0	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	108	J	41.4	MDL	111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.39	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.86	J	0.931	MDL	5.54	PQL	mg/Kg	U	B

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 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
PHOSPHORUS	471		0.620	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2560		19.9	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	83.8	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	2.62	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.31	J	0.931	MDL	5.54	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0793	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.233		0.0654	MDL	0.218	PQL	mg/Kg	J	Q
CADMIUM	0.0603	J	0.0436	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	19.1		0.131	MDL	0.436	PQL	mg/Kg	J	Q
LEAD	5.98		0.0113	MDL	0.218	PQL	mg/Kg	J	Q
SILVER	0.0296	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	35.8		0.0240	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory:** LL

EDD Filename: DE062_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.344		0.0702	MDL	0.234	PQL	mg/Kg	J	Q
CHROMIUM	36.0		0.140	MDL	0.468	PQL	mg/Kg	J	Q
LEAD	10.4		0.0122	MDL	0.234	PQL	mg/Kg	J	Q
SILVER	0.0529	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	63.7		0.0257	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0590	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.207	J	0.0702	MDL	0.234	PQL	mg/Kg	J	Z, Q
CHROMIUM	25.5		0.140	MDL	0.468	PQL	mg/Kg	J	Q
LEAD	7.71		0.0122	MDL	0.234	PQL	mg/Kg	J	Q
SILVER	0.107	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	49.2		0.0257	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.131	J	0.0690	MDL	0.230	PQL	mg/Kg	J	Z, Q
CHROMIUM	17.3		0.138	MDL	0.460	PQL	mg/Kg	J	Q
LEAD	6.34		0.0120	MDL	0.230	PQL	mg/Kg	J	Q
SILVER	0.0305	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	33.7		0.0253	MDL	0.115	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0535	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.165	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
CHROMIUM	19.6		0.136	MDL	0.452	PQL	mg/Kg	J	Q
LEAD	5.10		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
SILVER	0.0497	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	35.6		0.0249	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0491	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
CADMIUM	0.108	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	22.2		0.135	MDL	0.449	PQL	mg/Kg	J	Q
LEAD	5.99		0.0117	MDL	0.224	PQL	mg/Kg	J	Q
SILVER	0.0682	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	43.4		0.0247	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0907	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.212	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0963	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z
CHROMIUM	19.3		0.130	MDL	0.432	PQL	mg/Kg	J	Q
LEAD	5.55		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
VANADIUM	38.0		0.0238	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.179	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.265		0.0639	MDL	0.213	PQL	mg/Kg	J	Q
CADMIUM	0.0538	J	0.0426	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	23.1		0.128	MDL	0.426	PQL	mg/Kg	J	Q
LEAD	7.02		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
SILVER	0.0168	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	42.1		0.0234	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0724	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.159	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
CHROMIUM	19.0		0.132	MDL	0.439	PQL	mg/Kg	J	Q
LEAD	5.05		0.0114	MDL	0.220	PQL	mg/Kg	J	Q
SILVER	0.0262	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	38.1		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory:** LL

EDD Filename: DE062_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0961	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.171	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q
CHROMIUM	23.0		0.133	MDL	0.443	PQL	mg/Kg	J	Q
LEAD	7.42		0.0115	MDL	0.222	PQL	mg/Kg	J	Q
SILVER	0.0451	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	40.5		0.0244	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *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	0.24	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 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
HEXAVALENT CHROMIUM	0.30	J	0.23	MDL	1.2	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0047	J	0.0034	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 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
MERCURY	0.0043	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *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	19.7	J	18.2	MDL	36.4	PQL	ng/Kg	J	Z

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	26.0	J	17.9	MDL	35.9	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *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)	0.98	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *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)	0.77	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *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)	0.94	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *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)	0.79	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* REA *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	L

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* REA *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	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *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	L
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* REA *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	L

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *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	L
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* REA *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	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *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 1254	0.61	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* REA *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	L

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* REA *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	L

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* REA *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	L

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* REA *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	L

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* REA *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	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 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
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C SIM Matrix: SO

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *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	7.8	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: SL-039-SA5B-SB-9.0-10.0 *Collected:* 1/17/2011 3:21:00 *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	7.3	J	7.1	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.88	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.53	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *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	11	J	7.1	MDL	21	PQL	ug/Kg	U	B
FLUORENE	1.8	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *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(B)FLUORANTHENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.89	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *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	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *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	8.7	J	6.9	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *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	0.52	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.76	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.90	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.86	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.78	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.0	J	6.5	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.66	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.78	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.78	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.88	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM Matrix: SO

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	0.80	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.74	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.5	MDL	19	PQL	ug/Kg	U	B

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *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(B)FLUORANTHENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.9	J	6.7	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.56	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *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(B)FLUORANTHENE	0.90	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.1	J	6.8	MDL	20	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8015B Matrix: SO

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 9:45:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	490	J	120	MDL	580	PQL	ug/Kg	J	Z

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	270	J	120	MDL	580	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	150	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	280	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	250	J	110	MDL	560	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-039-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:18:00 *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)	6.3	J	1.2	MDL	7.8	PQL	ug/Kg	J	Z
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.8	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.40	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-078-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:47:00 *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.37	U	0.37	MDL	7.5	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.89	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-082-SA5B-SB-2.25-3.25 *Collected:* 1/17/2011 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
4-METHYL-2-PENTANONE (MIBK)	0.45	U	0.45	MDL	9.3	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.72	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.22	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-082-SA5B-SB-7.0-8.0 *Collected:* 1/17/2011 9:53:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.7	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-101-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 9:49:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	7.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-101-SA5B-SB-7.5-8.5 *Collected:* 1/17/2011 9:59:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.46	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-112-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 11:39:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.56	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-113-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 2:29:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-117-SA5B-SB-4.0-5.0 *Collected:* 1/17/2011 3:54:00 *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.42	U	0.42	MDL	8.6	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.78	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE062

Method Blank Outlier Report

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02008BB222236	1/21/2011 10:36:00 PM	PHOSPHORUS TIN	1.24 mg/Kg 1.12 mg/Kg	SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-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-SA5B-SB-4.0-5.0(RES)	TIN	2.32 mg/Kg	2.32U mg/Kg
SL-039-SA5B-SB-9.0-10.0(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-078-SA5B-SB-4.0-5.0(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-082-SA5B-SB-2.25-3.25(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SL-082-SA5B-SB-7.0-8.0(RES)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-101-SA5B-SB-4.0-5.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-101-SA5B-SB-7.5-8.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-112-SA5B-SB-4.0-5.0(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-113-SA5B-SB-4.0-5.0(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-117-SA5B-SB-4.0-5.0(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg

Method: 7199
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02743AB272127A	1/30/2011 9:27:00 PM	HEXAVALENT CHROMIUM	0.26 mg/Kg	SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-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-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.42 mg/Kg	0.42U mg/Kg
SL-039-SA5B-SB-9.0-10.0(RES)	HEXAVALENT CHROMIUM	0.35 mg/Kg	0.35U mg/Kg
SL-082-SA5B-SB-2.25-3.25(RES)	HEXAVALENT CHROMIUM	0.30 mg/Kg	0.30U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE062 | Laboratory: LL

EDD Filename: DE062_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB52B211818A	1/19/2011 6:18:00 PM	METHYLENE CHLORIDE TOLUENE	0.46 ug/Kg 0.21 ug/Kg	SL-039-SA5B-SB-4.0-5.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-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-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	3.9U ug/Kg
SL-078-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.89 ug/Kg	3.8U ug/Kg
SL-082-SA5B-SB-2.25-3.25(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	4.6U ug/Kg
SL-082-SA5B-SB-2.25-3.25(RES)	TOLUENE	0.22 ug/Kg	4.6U ug/Kg
SL-082-SA5B-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.0U ug/Kg
SL-101-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.0U ug/Kg
SL-101-SA5B-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	4.0U ug/Kg
SL-112-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.0U ug/Kg
SL-113-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.0U ug/Kg
SL-117-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.3U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA02B260119	1/26/2011 1:19:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	9.2 ug/Kg	SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-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-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.8 ug/Kg	20U ug/Kg
SL-039-SA5B-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.3 ug/Kg	21U ug/Kg
SL-078-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	21U ug/Kg
SL-101-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.7 ug/Kg	21U ug/Kg
SL-101-SA5B-SB-7.5-8.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.0 ug/Kg	20U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method: **8270C SIM**
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-112-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	14 ug/Kg	19U ug/Kg
SL-113-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	6.9 ug/Kg	20U ug/Kg
SL-117-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.1 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE062 | Laboratory: LL

EDD Filename: DE062_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-112-SA5B-SB-4.0-5.0MS SL-112-SA5B-SB-4.0-5.0MSD (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	ANTIMONY CHROMIUM LEAD VANADIUM ZINC	54 - 74 - -	52 65 - 46 63	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ANTIMONY CHROMIUM LEAD VANADIUM ZINC	J (all detects) UJ (all non-detects) Zn No Qual, >4x
SL-112-SA5B-SB-4.0-5.0MS SL-112-SA5B-SB-4.0-5.0MSD (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	BARIUM	59	-10	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-112-SA5B-SB-4.0-5.0MS SL-112-SA5B-SB-4.0-5.0MSD (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	ALUMINUM CALCIUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	1769 160 3226 502 134 134 321	1396 290 324 291 - 132 250	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	- - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Ti No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-112-SA5B-SB-4.0-5.0MSD (SL-112-SA5B-SB-4.0-5.0)	Diethylphthalate	-	139	87.00-131.00	36 (30.00)	Diethylphthalate	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_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-101-SA5B-SB-4.0-5.0MS (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	FLUORIDE	10	-	80.00-120.00	-	FLUORIDE	J(all detects) R(all non-detects)
SL-101-SA5B-SB-7.5-8.5MS (SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	Nitrate-NO3	77	-	80.00-120.00	-	Nitrate-NO3	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE062 **Laboratory: LL**

EDD Filename: DE062_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-112-SA5B-SB-4.0-5.0DUP (SL-039-SA5B-SB-4.0-5.0 SL -039-SA5B-SB-9.0-10.0 SL -078-SA5B-SB-4.0-5.0 SL -082-SA5B-SB-2.25-3.25 SL -082-SA5B-SB-7.0-8.0 SL -101-SA5B-SB-4.0-5.0 SL -101-SA5B-SB-7.5-8.5 SL -112-SA5B-SB-4.0-5.0 SL -113-SA5B-SB-4.0-5.0 SL -117-SA5B-SB-4.0-5.0)	CADMIUM SILVER	54 57	20.00 20.00	No Qual OK by difference

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-101-SA5B-SB-4.0-5.0DUP (SL-039-SA5B-SB-4.0-5.0 SL -039-SA5B-SB-9.0-10.0 SL -078-SA5B-SB-4.0-5.0 SL -082-SA5B-SB-2.25-3.25 SL -082-SA5B-SB-7.0-8.0 SL -101-SA5B-SB-4.0-5.0 SL -101-SA5B-SB-7.5-8.5 SL -113-SA5B-SB-4.0-5.0 SL -117-SA5B-SB-4.0-5.0)	FLUORIDE	34	20.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_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
P9LBLCSQ261708 (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	3,3'-DICHLOROBENZIDINE	36	-	38.00-105.00	-	3,3'-DICHLOROBENZIDINE	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
P02026AQ222135A (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	ANTIMONY	125	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10208AQ240122A (SL-039-SA5B-SB-4.0-5.0 SL-039-SA5B-SB-9.0-10.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	Aroclor 5442	64	-	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_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
LCSB52Y211907A (SL-039-SA5B-SB-4.0-5.0 SL-078-SA5B-SB-4.0-5.0 SL-082-SA5B-SB-2.25-3.25 SL-082-SA5B-SB-7.0-8.0 SL-101-SA5B-SB-4.0-5.0 SL-101-SA5B-SB-7.5-8.5 SL-112-SA5B-SB-4.0-5.0 SL-113-SA5B-SB-4.0-5.0 SL-117-SA5B-SB-4.0-5.0)	4-METHYL-2-PENTANONE (MIB	-	60	61.00-134.00	-	4-METHYL-2-PENTANONE (MI	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-101-SA5B-SB-7.5-8.5	N-NITROSODIMETHYLAMINE	J	19.7	36.4	PQL	ng/Kg	J (all detects)
SL-112-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	26.0	35.9	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)
SL-113-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5B-SB-4.0-5.0	TIN Zirconium	J J	2.32 2.30	11.0 5.50	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-039-SA5B-SB-9.0-10.0	TIN Zirconium	J J	2.60 5.52	11.8 5.91	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-078-SA5B-SB-4.0-5.0	TIN Zirconium	J J	2.92 2.53	11.7 5.85	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-082-SA5B-SB-2.25-3.25	TIN Zirconium	J J	2.34 2.98	11.5 5.75	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-082-SA5B-SB-7.0-8.0	TIN Zirconium	J J	2.69 2.03	11.2 5.60	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-101-SA5B-SB-4.0-5.0	TIN Zirconium	J J	2.58 3.15	11.1 5.55	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-101-SA5B-SB-7.5-8.5	TIN Zirconium	J J	2.40 1.67	10.6 5.29	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-112-SA5B-SB-4.0-5.0	TIN Zirconium	J J	2.55 2.71	10.6 5.28	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-113-SA5B-SB-4.0-5.0	SODIUM TIN Zirconium	J J J	108 2.39 1.86	111 11.1 5.54	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-117-SA5B-SB-4.0-5.0	SODIUM TIN Zirconium	J J J	83.8 2.62 2.31	111 11.1 5.54	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5B-SB-4.0-5.0	CADMIUM	J	0.0603	0.109	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0793	0.436	PQL	mg/Kg	
	SILVER	J	0.0296	0.109	PQL	mg/Kg	
SL-039-SA5B-SB-9.0-10.0	SELENIUM	J	0.142	0.468	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0529	0.117	PQL	mg/Kg	
SL-078-SA5B-SB-4.0-5.0	ANTIMONY	J	0.207	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0590	0.468	PQL	mg/Kg	
	SILVER	J	0.107	0.117	PQL	mg/Kg	
SL-082-SA5B-SB-2.25-3.25	ANTIMONY	J	0.131	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.460	PQL	mg/Kg	
	SILVER	J	0.0305	0.115	PQL	mg/Kg	
SL-082-SA5B-SB-7.0-8.0	ANTIMONY	J	0.165	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0535	0.452	PQL	mg/Kg	
	SILVER	J	0.0497	0.113	PQL	mg/Kg	
SL-101-SA5B-SB-4.0-5.0	ANTIMONY	J	0.151	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.108	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0491	0.449	PQL	mg/Kg	
	SILVER	J	0.0682	0.112	PQL	mg/Kg	
SL-101-SA5B-SB-7.5-8.5	ANTIMONY	J	0.212	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0963	0.108	PQL	mg/Kg	
	SELENIUM	J	0.0907	0.432	PQL	mg/Kg	
SL-112-SA5B-SB-4.0-5.0	CADMIUM	J	0.0538	0.107	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.179	0.426	PQL	mg/Kg	
	SILVER	J	0.0168	0.107	PQL	mg/Kg	
SL-113-SA5B-SB-4.0-5.0	ANTIMONY	J	0.159	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0724	0.439	PQL	mg/Kg	
	SILVER	J	0.0262	0.110	PQL	mg/Kg	
SL-117-SA5B-SB-4.0-5.0	ANTIMONY	J	0.171	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0961	0.443	PQL	mg/Kg	
	SILVER	J	0.0451	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-039-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-082-SA5B-SB-2.25-3.25	HEXAVALENT CHROMIUM	J	0.30	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5B-SB-9.0-10.0	MERCURY	J	0.0047	0.117	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE062 Laboratory: LL

EDD Filename: DE062_v1 eQAPP Name: CDM_SSFL_110509

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5B-SB-7.0-8.0	MERCURY	J	0.0036	0.113	PQL	mg/Kg	J (all detects)
SL-112-SA5B-SB-4.0-5.0	MERCURY	J	0.0051	0.106	PQL	mg/Kg	J (all detects)
SL-117-SA5B-SB-4.0-5.0	MERCURY	J	0.0043	0.109	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5B-SB-2.25-3.25	METHANOL	J	490	580	PQL	ug/Kg	J (all detects)
SL-082-SA5B-SB-7.0-8.0	METHANOL	J	270	580	PQL	ug/Kg	J (all detects)
SL-101-SA5B-SB-7.5-8.5	METHANOL	J	150	550	PQL	ug/Kg	J (all detects)
SL-113-SA5B-SB-4.0-5.0	METHANOL	J	280	560	PQL	ug/Kg	J (all detects)
SL-117-SA5B-SB-4.0-5.0	METHANOL	J	250	560	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5B-SB-2.25-3.25	EFH (C15-C20)	J	0.98	1.4	PQL	mg/Kg	J (all detects)
SL-101-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	0.77	1.4	PQL	mg/Kg	J (all detects)
SL-112-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	0.94	1.3	PQL	mg/Kg	J (all detects)
SL-117-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.79	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5B-SB-7.0-8.0	AROCLOR 1254	J	0.61	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5B-SB-4.0-5.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	6.3 0.40	7.8 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-078-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.89	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE062 **Laboratory:** LL

EDD Filename: DE062_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-082-SA5B-SB-2.25-3.25	METHYLENE CHLORIDE	J	0.72	4.6	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.22	4.6	PQL	ug/Kg	
SL-082-SA5B-SB-7.0-8.0	METHYLENE CHLORIDE	J	1.7	4.0	PQL	ug/Kg	J (all detects)
SL-101-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.43	4.0	PQL	ug/Kg	J (all detects)
SL-101-SA5B-SB-7.5-8.5	METHYLENE CHLORIDE	J	0.46	4.0	PQL	ug/Kg	J (all detects)
SL-112-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.56	4.0	PQL	ug/Kg	J (all detects)
SL-113-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.43	4.0	PQL	ug/Kg	J (all detects)
SL-117-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.78	4.3	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-039-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.8	20	PQL	ug/Kg	J (all detects)
SL-039-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	21	PQL	ug/Kg	J (all detects)
SL-078-SA5B-SB-4.0-5.0	ACENAPHTHENE	J	0.88	2.0	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.53	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	
	FLUORENE	J	1.8	2.0	PQL	ug/Kg	
SL-082-SA5B-SB-2.25-3.25	BENZO(B)FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.89	1.9	PQL	ug/Kg	
SL-082-SA5B-SB-7.0-8.0	BENZO(A)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
SL-101-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.7	21	PQL	ug/Kg	J (all detects)
SL-101-SA5B-SB-7.5-8.5	ANTHRACENE	J	0.52	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.76	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.74	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	0.90	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.86	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.78	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.0	20	PQL	ug/Kg	
	CHRYSENE	J	0.66	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.78	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.78	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.88	1.8	PQL	ug/Kg	
	PYRENE	J	0.80	1.8	PQL	ug/Kg	
SL-112-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	19	PQL	ug/Kg	
SL-113-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.2	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.9	20	PQL	ug/Kg	
	CHRYSENE	J	0.56	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE062 | Laboratory: LL

EDD Filename: DE062_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-117-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.90	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.1	20	PQL	ug/Kg	

LDC #: 25750M4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/4
SDG #: DE062 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MSD (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4X)
VII.	Duplicate Sample Analysis	N	DUP (Cd, As <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
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	—	
XV	Field Blanks	—	

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: Sr: 1

1	SL-112-SA5B-SB-4.0-5.0	11	(X1) MS	21		31	
2	SL-101-SA5B-SB-4.0-5.0	12	↓ MSD	22		32	
3	SL-101-SA5B-SB-7.5-8.5	13	↓ DUP	23		33	
4	SL-078-SA5B-SB-4.0-5.0	14		24		34	
5	SL-082-SA5B-SB-2.25-3.25	15		25		35	
6	SL-082-SA5B-SB-7.0-8.0	16		26		36	
7	SL-039-SA5B-SB-4.0-5.0	17		27		37	
8	SL-039-SA5B-SB-9.0-10.0	18		28		38	
9	SL-113-SA5B-SB-4.0-5.0	19		29		39	
10	SL-117-SA5B-SB-4.0-5.0	20		30		40	

Notes: _____

LDC #: 25750M 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	3	6	7	9	10												
Zr			4.7	2.35	1.7	2.0	2.3	1.9	2.3												

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.

SAMPLE DELIVERY GROUP

DE063

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
18-Jan-2011	TB-011811	6185963	TB	5030B	8015M	III
18-Jan-2011	TB-011811	6185963	TB	5030B	8260B	III
18-Jan-2011	TB-011811	6185963	TB	5030B	8260B SIM	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	3050B	6010B	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	3050B	6020	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	3060A	7199	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	3550B	8082	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	3550B	8270C	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	3550B	8270C SIM	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	5035	8260B	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	5035	8260B SIM	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	Gen Prep	9045M	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	METHOD	300.0	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	METHOD	314.0	III
18-Jan-2011	SL-295-SA5B-SB-4.0-5.0	6185952	N	METHOD	7471A	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	3050B	6010B	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	3050B	6020	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	3060A	7199	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	3550B	8082	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	3550B	8270C	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	3550B	8270C SIM	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	Gen Prep	9045M	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	METHOD	300.0	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	METHOD	314.0	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10	6185953	N	METHOD	7471A	III
18-Jan-2011	SL-295-SA5B-SB-9.0-10MSD	P185953M262057	MSD	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
18-Jan-2011	SL-295-SA5B-SB-9.0-10MS	P185953R262025	MS	3550B	8270C SIM	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3050B	6010B	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3050B	6020	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3060A	7199	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3546	1625C	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3550B	8015B	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3550B	8015M	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3550B	8082	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3550B	8270C	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	3550B	8270C SIM	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	5035	8015M	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	5035	8260B	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	5035	8260B SIM	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	8330	8330A	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	Gen Prep	9045M	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	300.0	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	314.0	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	7471A	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	8015B	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	8015M	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	8315A	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0	6185954	N	METHOD	9012B	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0DUP	P185954D271009A	DUP	METHOD	9012B	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0DUP	P185954D291030A	DUP	Gen Prep	9045M	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0MSD	P185954M260849	MSD	3546	1625C	III
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0MS	P185954R260833	MS	3546	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
18-Jan-2011	SL-118-SA5B-SB-4.0-5.0MS	P185954R271010A	MS	METHOD	9012B	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3050B	6010B	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3050B	6020	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3060A	7199	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3546	1625C	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3550B	8015B	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3550B	8015M	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3550B	8082	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3550B	8270C	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	3550B	8270C SIM	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	5035	8015M	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	5035	8260B	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	5035	8260B SIM	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	8330	8330A	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	Gen Prep	9045M	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	300.0	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	314.0	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	7471A	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	8015B	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	8015M	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	8315A	III
18-Jan-2011	SL-118-SA5B-SB-8.0-9.0	6185955	N	METHOD	9012B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	3060A	7199	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	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
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	3550B	8270C	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	3550B	8270C SIM	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	5035	8260B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	5035	8260B SIM	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	Gen Prep	9045M	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	METHOD	300.0	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	METHOD	314.0	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	METHOD	6850	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0	6185950	N	METHOD	7471A	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D220002	DUP	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D220646A	DUP	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D221311	DUP	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D221916	DUP	METHOD	7471A	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D222351A	DUP	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D222351B	DUP	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D222351C	DUP	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D222351D	DUP	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D270145A	DUP	METHOD	300.0	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0DUP	P185950D271911A	DUP	METHOD	314.0	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M220010	MSD	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M221318	MSD	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M221919	MSD	METHOD	7471A	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M222357A	MSD	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M222357B	MSD	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M222357C	MSD	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M222357D	MSD	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M240806A	MSD	3550B	8082	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MSD	P185950M260509	MSD	3550B	8270C	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R220006	MS	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R221315	MS	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R221917	MS	METHOD	7471A	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R222354A	MS	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R222354B	MS	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R222354C	MS	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R222354D	MS	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R240748A	MS	3550B	8082	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R260434	MS	3550B	8270C	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R270201A	MS	METHOD	300.0	III
18-Jan-2011	SL-296-SA5B-SB-4.0-5.0MS	P185950R271934A	MS	METHOD	314.0	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	3050B	6010B	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	3050B	6020	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	3060A	7199	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	3550B	8082	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	3550B	8270C	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	3550B	8270C SIM	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	Gen Prep	9045M	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	METHOD	300.0	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	METHOD	314.0	III
18-Jan-2011	SL-296-SA5B-SB-9.0-10.0	6185951	N	METHOD	7471A	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3050B	6010B	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3050B	6020	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3060A	7199	III

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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
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3546	1625C	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3550B	8015B	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3550B	8015M	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3550B	8082	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3550B	8270C	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	3550B	8270C SIM	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	5035	8015M	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	5035	8260B	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	5035	8260B SIM	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	8330	8330A	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	Gen Prep	9045M	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	300.0	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	314.0	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	7471A	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	8015B	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	8015M	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	8315A	III
18-Jan-2011	SL-116-SA5B-SB-4.0-5.0	6185956	N	METHOD	9012B	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	3050B	6010B	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	3050B	6020	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	3060A	7199	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	3550B	8082	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	3550B	8270C	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	3550B	8270C SIM	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	5035	8260B	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	Gen Prep	9045M	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	METHOD	300.0	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	METHOD	314.0	III
18-Jan-2011	SL-283-SA5B-SB-4.0-5.0	6185957	N	METHOD	7471A	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	3050B	6010B	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	3050B	6020	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	3060A	7199	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	3550B	8082	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	3550B	8270C	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	3550B	8270C SIM	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	Gen Prep	9045M	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	METHOD	300.0	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	METHOD	314.0	III
18-Jan-2011	SL-283-SA5B-SB-9.0-10.0	6185958	N	METHOD	7471A	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3050B	6010B	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3050B	6020	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3060A	7199	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3546	1625C	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3550B	8015B	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3550B	8015M	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3550B	8082	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3550B	8270C	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	3550B	8270C SIM	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	5035	8015M	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	5035	8260B	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	8330	8330A	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	Gen Prep	9045M	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	300.0	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	314.0	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	7471A	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	8015B	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	8015M	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	8315A	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0	6185962	N	METHOD	9012B	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0DUP	P185962D270134A	DUP	3060A	7199	III
18-Jan-2011	SL-114-SA5B-SB-4.0-5.0MS	P185962R270103A	MS	3060A	7199	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	3050B	6010B	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	3050B	6020	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	3060A	7199	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	3550B	8082	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	3550B	8270C	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	3550B	8270C SIM	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	5035	8260B	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	5035	8260B SIM	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	Gen Prep	9045M	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	METHOD	300.0	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	METHOD	314.0	III
18-Jan-2011	SL-280-SA5B-SB-4.0-5.0	6185959	N	METHOD	7471A	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	3050B	6010B	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	3050B	6020	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	3060A	7199	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	3550B	8082	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	3550B	8270C	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	3550B	8270C SIM	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	Gen Prep	9045M	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	METHOD	300.0	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	METHOD	314.0	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	METHOD	6850	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10	6185960	N	METHOD	7471A	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10DUP	P185960D270010B	DUP	METHOD	314.0	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10DUP	P185960D270525B	DUP	METHOD	300.0	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10MS	P185960R270033B	MS	METHOD	314.0	III
18-Jan-2011	SL-280-SA5B-SB-9.0-10MS	P185960R270541B	MS	METHOD	300.0	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3050B	6010B	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3050B	6020	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3060A	7199	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3546	1625C	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3550B	8015B	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3550B	8015M	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3550B	8082	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3550B	8270C	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	3550B	8270C SIM	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	5035	8015M	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	5035	8260B	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	5035	8260B SIM	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	8330	8330A	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	Gen Prep	9045M	III

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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
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	METHOD	300.0	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	METHOD	314.0	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	METHOD	7471A	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	METHOD	8015B	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	METHOD	8015M	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	N	METHOD	8315A	III
18-Jan-2011	SL-115-SA5B-SB-4.0-5.0	6185961	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: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.9		0.88	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
Nitrate-NO3	1.5	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.9		0.95	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B Matrix: SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2910		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	2.55	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.54	J	0.896	MDL	5.33	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2780		19.5	MDL	54.2	PQL	mg/Kg	J	Q
SODIUM	104	J	40.5	MDL	108	PQL	mg/Kg	J	Z
TIN	2.73	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.40	J	0.911	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
POTASSIUM	2930		20.3	MDL	56.3	PQL	mg/Kg	J	Q
SODIUM	96.8	J	42.0	MDL	113	PQL	mg/Kg	J	Z
TIN	3.04	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.83	J	0.945	MDL	5.63	PQL	mg/Kg	U	B

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1320		19.9	MDL	55.4	PQL	mg/Kg	J	Q
TIN	2.71	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.71	J	0.930	MDL	5.54	PQL	mg/Kg	U	B

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	7.36	J	4.94	MDL	27.8	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2850		20.0	MDL	55.6	PQL	mg/Kg	J	Q
TIN	4.05	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	4.17	J	0.933	MDL	5.56	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory:** LL

EDD Filename: DE063_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
POTASSIUM	2070		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.66	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.67	J	0.925	MDL	5.51	PQL	mg/Kg	U	B

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4680		20.9	MDL	58.1	PQL	mg/Kg	J	Q
TIN	2.81	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2430		20.3	MDL	56.3	PQL	mg/Kg	J	Q
TIN	2.22	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	5.04	J	0.946	MDL	5.63	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2730		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	1.90	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.81	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2900		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.77	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	4.26	J	0.950	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3840		20.8	MDL	57.9	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.10	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	5.70	J	0.973	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
POTASSIUM	2430		19.4	MDL	53.8	PQL	mg/Kg	J	Q
TIN	2.08	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.96	J	0.904	MDL	5.38	PQL	mg/Kg	U	B

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 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
POTASSIUM	2640		19.5	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.27	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.78	J	0.908	MDL	5.40	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0928	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.119	J	0.0646	MDL	0.215	PQL	mg/Kg	UJ	Q, B
COBALT	6.19		0.0215	MDL	0.108	PQL	mg/Kg	J	A
COPPER	10.0		0.0711	MDL	0.431	PQL	mg/Kg	J	A
LEAD	6.17		0.0112	MDL	0.215	PQL	mg/Kg	J	Q
SILVER	0.0357	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory:** LL

EDD Filename: DE063_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.301		0.0638	MDL	0.213	PQL	mg/Kg	UJ	Q, B
COBALT	7.49		0.0213	MDL	0.106	PQL	mg/Kg	J	A
COPPER	10.6		0.0702	MDL	0.425	PQL	mg/Kg	J	A
LEAD	6.87		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
SILVER	0.0257	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *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	0.0675	MDL	0.225	PQL	mg/Kg	UJ	Q, B
COBALT	7.36		0.0225	MDL	0.113	PQL	mg/Kg	J	A
COPPER	11.0		0.0743	MDL	0.450	PQL	mg/Kg	J	A
LEAD	7.82		0.0117	MDL	0.225	PQL	mg/Kg	J	Q
SILVER	0.0266	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.197	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0677	MDL	0.226	PQL	mg/Kg	UJ	Q, B
CADMIUM	0.0859	J	0.0452	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	5.50		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	7.37		0.0745	MDL	0.452	PQL	mg/Kg	J	A
LEAD	6.93		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
SILVER	0.0508	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0755	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0660	MDL	0.220	PQL	mg/Kg	UJ	Q, B
COBALT	11.7		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	23.1		0.0726	MDL	0.440	PQL	mg/Kg	J	A
LEAD	16.8		0.0114	MDL	0.220	PQL	mg/Kg	J	Q

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0661	MDL	0.220	PQL	mg/Kg	UJ	Q, B
CADMIUM	0.0733	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z
COBALT	5.70		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	6.72		0.0727	MDL	0.441	PQL	mg/Kg	J	A
LEAD	6.94		0.0115	MDL	0.220	PQL	mg/Kg	J	Q
SILVER	0.0281	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.282		0.0704	MDL	0.235	PQL	mg/Kg	UJ	Q, B
COBALT	8.70		0.0235	MDL	0.117	PQL	mg/Kg	J	A
COPPER	15.4		0.0774	MDL	0.469	PQL	mg/Kg	J	A
LEAD	10.0		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
SILVER	0.0454	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.206	J	0.0656	MDL	0.219	PQL	mg/Kg	UJ	Q, B
COBALT	4.79		0.0219	MDL	0.109	PQL	mg/Kg	J	A
COPPER	7.45		0.0722	MDL	0.437	PQL	mg/Kg	J	A
LEAD	5.24		0.0114	MDL	0.219	PQL	mg/Kg	J	Q
SILVER	0.0197	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.151	J	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, B
COBALT	5.20		0.0222	MDL	0.111	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.16		0.0732	MDL	0.444	PQL	mg/Kg	J	A
LEAD	7.28		0.0115	MDL	0.222	PQL	mg/Kg	J	Q
SILVER	0.0271	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0672	MDL	0.224	PQL	mg/Kg	UJ	Q, B
COBALT	7.13		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	8.44		0.0739	MDL	0.448	PQL	mg/Kg	J	A
LEAD	6.21		0.0117	MDL	0.224	PQL	mg/Kg	J	Q
SILVER	0.0355	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.168	J	0.0463	MDL	0.463	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.368		0.0695	MDL	0.232	PQL	mg/Kg	UJ	Q, B
COBALT	8.98		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	14.3		0.0764	MDL	0.463	PQL	mg/Kg	J	A
LEAD	10.2		0.0120	MDL	0.232	PQL	mg/Kg	J	Q
SILVER	0.0409	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 11:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.170	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 11:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.213	J	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q, B
COBALT	4.96		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	8.14		0.0724	MDL	0.439	PQL	mg/Kg	J	A
LEAD	4.83		0.0114	MDL	0.220	PQL	mg/Kg	J	Q
SILVER	0.0252	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 11:24:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 11:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0919	J	0.0649	MDL	0.216	PQL	mg/Kg	UJ	Q, B
COBALT	5.13		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	7.62		0.0713	MDL	0.432	PQL	mg/Kg	J	A
LEAD	4.99		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
SILVER	0.0222	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *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	0.22	MDL	1.1	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
HEXAVALENT CHROMIUM	0.28	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *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	1.1	PQL	mg/Kg	U	B

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.24	MDL	1.2	PQL	mg/Kg	U	B

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *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	1.1	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory:** LL

EDD Filename: DE063_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *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	U	B

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
HEXAVALENT CHROMIUM	0.33	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 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
HEXAVALENT CHROMIUM	0.31	J	0.22	MDL	1.1	PQL	mg/Kg	U	B

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0085	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0047	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
MERCURY	0.0059	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0113	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0195	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
MERCURY	0.0083	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0047	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0103	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0142	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0054	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0740	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 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
MERCURY	0.0086	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 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
MERCURY	0.0137	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

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

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *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	41.5		19.0	MDL	38.0	PQL	ng/Kg	U	B

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

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.3	J	2.2	MDL	6.5	PQL	mg/Kg	J	Z

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *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)	0.55	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *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)	0.50	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C21-C30)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *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)	0.75	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *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)	0.51	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.47	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *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	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *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 1254	0.57	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	2.1	J	0.74	MDL	3.8	PQL	ug/Kg	J	Z, S
AROCLOR 1260	1.5	J	0.74	MDL	3.8	PQL	ug/Kg	J	Z, S

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.7	J	0.75	MDL	3.8	PQL	ug/Kg	J	Z, S

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *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 1254	0.85	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory:** LL

EDD Filename: DE063_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 11:24:00 *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 1254	3.0		0.36	MDL	1.9	PQL	ug/Kg	J	S

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L
FLUORANTHENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	27	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 11:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 11:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
ANTHRACENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	97	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	43	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 11:24:00 *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(B)FLUORANTHENE	54	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	18	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	84	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	66	J	18	MDL	180	PQL	ug/Kg	J	Z

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

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *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	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.5	MDL	20	PQL	ug/Kg	UJ	L, B
CHRYSENE	0.64	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *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	8.3	J	6.6	MDL	20	PQL	ug/Kg	UJ	L, B

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *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(B)FLUORANTHENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.9	MDL	21	PQL	ug/Kg	UJ	L, B

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *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	18	J	6.8	MDL	21	PQL	ug/Kg	UJ	L, B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *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	7.3	J	6.7	MDL	20	PQL	ug/Kg	UJ	L, B

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.84	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	6.7	MDL	20	PQL	ug/Kg	UJ	L, B

Sample ID: SL-280-SA5B-SB-9.0-10 *Collected:* 1/18/2011 3:28:00 *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	9.2	J	7.1	MDL	21	PQL	ug/Kg	UJ	L, B

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *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	0.82	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.9	J	6.8	MDL	20	PQL	ug/Kg	UJ	L, B
CHRYSENE	0.59	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-283-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 12:53:00 *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(B)FLUORANTHENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.0	J	6.8	MDL	20	PQL	ug/Kg	UJ	L, B
CHRYSENE	0.44	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *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	11	J	6.9	MDL	21	PQL	ug/Kg	UJ	L, B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory:** LL

EDD Filename: DE063_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-295-SA5B-SB-9.0-10 *Collected:* 1/18/2011 9:48:00 *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(B)FLUORANTHENE	0.96	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	16	J	7.0	MDL	21	PQL	ug/Kg	UJ	Q, L, B
Butylbenzylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	Q
NAPHTHALENE	0.94	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 11:19:00 *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	0.87	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.6	MDL	20	PQL	ug/Kg	UJ	L, B
CHRYSENE	1.3	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.99	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

Sample ID: SL-296-SA5B-SB-9.0-10.0 *Collected:* 1/18/2011 11:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	0.79	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	280	J	110	MDL	540	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	260	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	280	J	110	MDL	570	PQL	ug/Kg	J	Z

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	400	J	110	MDL	570	PQL	ug/Kg	J	Z

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	350	J	110	MDL	560	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-114-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 2:34:00 *Analysis Type:* RES *Dilution:* 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.43	U	0.43	MDL	8.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.37	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-115-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:59:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.37	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-116-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:09:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	7.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.40	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-118-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:59:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.44	U	0.44	MDL	9.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.41	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-118-SA5B-SB-8.0-9.0 *Collected:* 1/18/2011 10:08:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.43	U	0.43	MDL	8.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.42	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-280-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 3:25:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.40	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-283-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 12:48:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.7	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-295-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 9:44:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.39	U	0.39	MDL	8.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-296-SA5B-SB-4.0-5.0 *Collected:* 1/18/2011 11:19:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.44	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE063

Method Blank Outlier Report

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLE02B260743	1/30/2011 7:43:00 AM	N-NITROSODIMETHYLAMINE	22.9 ng/Kg	SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-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
SL-118-SA5B-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	41.5 ng/Kg	41.5U ng/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02108BB221254	1/25/2011 12:54:00 PM	IRON	6.17 mg/Kg	SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-9.0-10.0
P02108BB222343	1/24/2011 11:43:00 PM	PHOSPHORUS TIN	1.61 mg/Kg 1.05 mg/Kg	SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-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
SL-114-SA5B-SB-4.0-5.0(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-115-SA5B-SB-4.0-5.0(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-116-SA5B-SB-4.0-5.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-118-SA5B-SB-4.0-5.0(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-118-SA5B-SB-8.0-9.0(RES)	TIN	4.05 mg/Kg	4.05U mg/Kg
SL-280-SA5B-SB-4.0-5.0(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
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-280-SA5B-SB-9.0-10(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-283-SA5B-SB-4.0-5.0(RES)	TIN	2.22 mg/Kg	2.22U mg/Kg
SL-283-SA5B-SB-9.0-10.0(RES)	TIN	1.90 mg/Kg	1.90U mg/Kg
SL-295-SA5B-SB-4.0-5.0(RES)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-295-SA5B-SB-9.0-10(RES)	TIN	2.10 mg/Kg	2.10U mg/Kg
SL-296-SA5B-SB-4.0-5.0(RES)	TIN	2.08 mg/Kg	2.08U mg/Kg
SL-296-SA5B-SB-9.0-10.0(RES)	TIN	2.27 mg/Kg	2.27U mg/Kg

Method: 7199
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02843AB272131A	2/1/2011 9:31:00 PM	HEXAVALENT CHROMIUM	0.25 mg/Kg	SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-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
SL-114-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.47 mg/Kg	0.47U mg/Kg
SL-115-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.31 mg/Kg	0.31U mg/Kg
SL-116-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.28 mg/Kg	0.28U mg/Kg
SL-118-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.63 mg/Kg	0.63U mg/Kg
SL-280-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.39 mg/Kg	0.39U mg/Kg
SL-280-SA5B-SB-9.0-10(RES)	HEXAVALENT CHROMIUM	0.45 mg/Kg	0.45U mg/Kg
SL-283-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.32 mg/Kg	0.32U mg/Kg
SL-283-SA5B-SB-9.0-10.0(RES)	HEXAVALENT CHROMIUM	0.36 mg/Kg	0.36U mg/Kg
SL-295-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.43 mg/Kg	0.43U mg/Kg
SL-295-SA5B-SB-9.0-10(RES)	HEXAVALENT CHROMIUM	0.63 mg/Kg	0.63U mg/Kg
SL-296-SA5B-SB-4.0-5.0(RES)	HEXAVALENT CHROMIUM	0.33 mg/Kg	0.33U mg/Kg
SL-296-SA5B-SB-9.0-10.0(RES)	HEXAVALENT CHROMIUM	0.31 mg/Kg	0.31U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB52B211818A	1/19/2011 6:18:00 PM	METHYLENE CHLORIDE TOLUENE	0.46 ug/Kg 0.21 ug/Kg	SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-4.0-5.0 SL-296-SA5B-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-114-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.37 ug/Kg	4.4U ug/Kg
SL-115-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.37 ug/Kg	4.0U ug/Kg
SL-116-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	4.0U ug/Kg
SL-118-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	4.5U ug/Kg
SL-118-SA5B-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.4U ug/Kg
SL-280-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	4.0U ug/Kg
SL-283-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	3.8U ug/Kg
SL-295-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.0U ug/Kg
SL-296-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.44 ug/Kg	4.1U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC02B261433	1/26/2011 2:33:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	8.7 ug/Kg	SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-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
SL-114-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	20U ug/Kg
SL-115-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.3 ug/Kg	20U ug/Kg
SL-116-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	21U ug/Kg
SL-118-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	18 ug/Kg	21U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
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-118-SA5B-SB-8.0-9.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.3 ug/Kg	20U ug/Kg
SL-280-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.9 ug/Kg	20U ug/Kg
SL-280-SA5B-SB-9.0-10(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	9.2 ug/Kg	21U ug/Kg
SL-283-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	6.9 ug/Kg	20U ug/Kg
SL-283-SA5B-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	7.0 ug/Kg	20U ug/Kg
SL-295-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	21U ug/Kg
SL-295-SA5B-SB-9.0-10(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	16 ug/Kg	21U ug/Kg
SL-296-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	12 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_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-296-SA5B-SB-4.0-5.0MSD (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-9.0-10.0)	LEAD	-	130	75.00-125.00	-	LEAD	J (all detects)
SL-296-SA5B-SB-4.0-5.0MS **SL-296-SA5B-SB-4.0-5.0MSD** (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-9.0-10.0)	ANTIMONY ZINC	43 59	42 -	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J(all detects) UJ(all non-detects) Zn No Qual, >4x
SL-296-SA5B-SB-4.0-5.0MS **SL-296-SA5B-SB-4.0-5.0MSD** (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-9.0-10.0)	BARIUM	24	63	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_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-296-SA5B-SB-4.0-5.0MS SL-296-SA5B-SB-4.0-5.0MSD (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-9.0-10.0)	ALUMINUM CALCIUM MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	1949 327 315 142 132 136 339	1870 242 269 148 - 132 313	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	- - - - - - -	ALUMINUM CALCIUM MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Ca, Mg, Mn, P, Ti No Qual, >4x
SL-296-SA5B-SB-4.0-5.0MS SL-296-SA5B-SB-4.0-5.0MSD (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10 SL-283-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-9.0-10.0 SL-295-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-9.0-10 SL-296-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-9.0-10.0)	IRON	1533	-928	75.00-125.00	-	IRON	No Qual, >4x

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-295-SA5B-SB-9.0-10MS SL-295-SA5B-SB-9.0-10MSD (SL-295-SA5B-SB-9.0-10)	BIS(2-ETHYLHEXYL)PHTHALAT Butylbenzylphthalate	21 47	30 54	39.00-167.00 73.00-140.00	- -	BIS(2-ETHYLHEXYL)PHTHALA Butylbenzylphthalate	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-280-SA5B-SB-9.0-10MS (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-280-SA5B-SB-9.0-10)	FLUORIDE	62	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8082**
Matrix: **SO**

QC Sample ID (Associated Samples)	*Compound*	*MS %R*	*MSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*
SL-296-SA5B-SB-4.0-5.0MS SL-296-SA5B-SB-4.0-5.0MSD (SL-296-SA5B-SB-4.0-5.0)	AROCLOR 1260	171	170	39.00-149.00	-	AROCLOR 1242, 1248, 1254, 1260	No Qual Diluted Out

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-114-SA5B-SB-4.0-5.0DUP (SL-114-SA5B-SB-4.0-5.0 SL -115-SA5B-SB-4.0-5.0 SL -116-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-8.0-9.0 SL -280-SA5B-SB-4.0-5.0 SL -280-SA5B-SB-9.0-10 SL -283-SA5B-SB-4.0-5.0 SL -283-SA5B-SB-9.0-10.0 SL -295-SA5B-SB-4.0-5.0 SL -295-SA5B-SB-9.0-10 SL -296-SA5B-SB-4.0-5.0 SL -296-SA5B-SB-9.0-10.0)	HEXAVALENT CHROMIUM	30	20.00	No Qual OK by difference

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-280-SA5B-SB-9.0-10DUP (SL-114-SA5B-SB-4.0-5.0 SL -115-SA5B-SB-4.0-5.0 SL -280-SA5B-SB-9.0-10)	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-296-SA5B-SB-4.0-5.0DUP (SL-114-SA5B-SB-4.0-5.0 SL -115-SA5B-SB-4.0-5.0 SL -116-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-8.0-9.0 SL -280-SA5B-SB-4.0-5.0 SL -280-SA5B-SB-9.0-10 SL -283-SA5B-SB-4.0-5.0 SL -283-SA5B-SB-9.0-10.0 SL -295-SA5B-SB-4.0-5.0 SL -295-SA5B-SB-9.0-10 SL -296-SA5B-SB-4.0-5.0 SL -296-SA5B-SB-9.0-10.0)	Zirconium	24	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-296-SA5B-SB-4.0-5.0DUP	ANTIMONY	84	20.00	
(SL-114-SA5B-SB-4.0-5.0	SELENIUM	22	20.00	
SL -115-SA5B-SB-4.0-5.0				
SL -116-SA5B-SB-4.0-5.0				
SL -118-SA5B-SB-4.0-5.0				
SL -118-SA5B-SB-8.0-9.0				
SL -280-SA5B-SB-4.0-5.0				No Qual
SL -280-SA5B-SB-9.0-10				OK by difference
SL -283-SA5B-SB-4.0-5.0				
SL -283-SA5B-SB-9.0-10.0				
SL -295-SA5B-SB-4.0-5.0				
SL -295-SA5B-SB-9.0-10				
SL -296-SA5B-SB-4.0-5.0				
SL -296-SA5B-SB-9.0-10.0)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-296-SA5B-SB-4.0-5.0DUP	MERCURY	42	20.00	
(SL-114-SA5B-SB-4.0-5.0				
SL -115-SA5B-SB-4.0-5.0				
SL -116-SA5B-SB-4.0-5.0				
SL -118-SA5B-SB-4.0-5.0				
SL -118-SA5B-SB-8.0-9.0				
SL -280-SA5B-SB-4.0-5.0				No Qual
SL -280-SA5B-SB-9.0-10				OK by difference
SL -283-SA5B-SB-4.0-5.0				
SL -283-SA5B-SB-9.0-10.0				
SL -295-SA5B-SB-4.0-5.0				
SL -295-SA5B-SB-9.0-10				
SL -296-SA5B-SB-4.0-5.0				
SL -296-SA5B-SB-9.0-10.0)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_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
P02126AQ222341A (SL-114-SA5B-SB-4.0-5.0 SL -115-SA5B-SB-4.0-5.0 SL -116-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-8.0-9.0 SL -280-SA5B-SB-4.0-5.0 SL -280-SA5B-SB-9.0-10 SL -283-SA5B-SB-4.0-5.0 SL -283-SA5B-SB-9.0-10.0 SL -295-SA5B-SB-4.0-5.0 SL -295-SA5B-SB-9.0-10 SL -296-SA5B-SB-4.0-5.0 SL -296-SA5B-SB-9.0-10.0)	ANTIMONY	124	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P1LCLCSQ261505 (SL-114-SA5B-SB-4.0-5.0 SL -115-SA5B-SB-4.0-5.0 SL -116-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-8.0-9.0 SL -280-SA5B-SB-4.0-5.0 SL -280-SA5B-SB-9.0-10 SL -283-SA5B-SB-4.0-5.0 SL -283-SA5B-SB-9.0-10.0 SL -295-SA5B-SB-4.0-5.0 SL -295-SA5B-SB-9.0-10 SL -296-SA5B-SB-4.0-5.0 SL -296-SA5B-SB-9.0-10.0)	BIS(2-ETHYLHEXYL)PHTHALAT	145	-	67.00-143.00	-	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5LCLCSQ262027 (SL-114-SA5B-SB-4.0-5.0 SL -115-SA5B-SB-4.0-5.0 SL -116-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-4.0-5.0 SL -118-SA5B-SB-8.0-9.0 SL -280-SA5B-SB-4.0-5.0 SL -280-SA5B-SB-9.0-10 SL -283-SA5B-SB-4.0-5.0 SL -283-SA5B-SB-9.0-10.0 SL -295-SA5B-SB-4.0-5.0 SL -295-SA5B-SB-9.0-10 SL -296-SA5B-SB-4.0-5.0 SL -296-SA5B-SB-9.0-10.0)	3,3'-DICHLOROBENZIDINE	36	-	38.00-105.00	-	3,3'-DICHLOROBENZIDINE	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_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*
LCSB52Y211907A (SL-114-SA5B-SB-4.0-5.0 SL-115-SA5B-SB-4.0-5.0 SL-116-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-4.0-5.0 SL-118-SA5B-SB-8.0-9.0 SL-280-SA5B-SB-4.0-5.0 SL-283-SA5B-SB-4.0-5.0 SL-295-SA5B-SB-4.0-5.0 SL-296-SA5B-SB-4.0-5.0)	4-METHYL-2-PENTANONE (MIB	-	60	61.00-134.00	-	4-METHYL-2-PENTANONE (MI	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-115-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	138	45.00-120.00	All Target Analytes	J (all detects)
SL-116-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	143	45.00-120.00	All Target Analytes	J(all detects)
SL-118-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	122	45.00-120.00	All Target Analytes	J(all detects)
SL-280-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	145	45.00-120.00	All Target Analytes	J(all detects)
SL-280-SA5B-SB-9.0-10	DECACHLOROBIPHENYL	146	45.00-120.00	All Target Analytes	J(all detects)
SL-283-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	142	45.00-120.00	All Target Analytes	J(all detects)
SL-283-SA5B-SB-9.0-10.0	DECACHLOROBIPHENYL	158	45.00-120.00	All Target Analytes	J(all detects)
SL-295-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	139	45.00-120.00	All Target Analytes	J(all detects)
SL-295-SA5B-SB-9.0-10	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	J(all detects)
SL-296-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	157	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-296-SA5B-SB-9.0-10.0	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-115-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-118-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	TIN	J	2.55	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.54	5.33	PQL	mg/Kg	
SL-115-SA5B-SB-4.0-5.0	SODIUM	J	104	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	10.8	PQL	mg/Kg	
	Zirconium	J	3.40	5.42	PQL	mg/Kg	
SL-116-SA5B-SB-4.0-5.0	SODIUM	J	96.8	113	PQL	mg/Kg	J (all detects)
	TIN	J	3.04	11.3	PQL	mg/Kg	
	Zirconium	J	3.83	5.63	PQL	mg/Kg	
SL-118-SA5B-SB-4.0-5.0	TIN	J	2.71	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.71	5.54	PQL	mg/Kg	
SL-118-SA5B-SB-8.0-9.0	BORON	J	7.36	27.8	PQL	mg/Kg	J (all detects)
	TIN	J	4.05	11.1	PQL	mg/Kg	
	Zirconium	J	4.17	5.56	PQL	mg/Kg	
SL-280-SA5B-SB-4.0-5.0	TIN	J	2.66	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.67	5.51	PQL	mg/Kg	
SL-280-SA5B-SB-9.0-10	TIN	J	2.81	11.6	PQL	mg/Kg	J (all detects)
SL-283-SA5B-SB-4.0-5.0	TIN	J	2.22	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.04	5.63	PQL	mg/Kg	
SL-283-SA5B-SB-9.0-10.0	TIN	J	1.90	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.81	5.66	PQL	mg/Kg	
SL-295-SA5B-SB-4.0-5.0	TIN	J	2.77	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.26	5.66	PQL	mg/Kg	
SL-295-SA5B-SB-9.0-10	TIN	J	2.10	11.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.70	5.79	PQL	mg/Kg	
SL-296-SA5B-SB-4.0-5.0	TIN	J	2.08	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.96	5.38	PQL	mg/Kg	
SL-296-SA5B-SB-9.0-10.0	TIN	J	2.27	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.78	5.40	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE063 | Laboratory: LL

EDD Filename: DE063_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	ANTIMONY	J	0.119	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0928	0.431	PQL	mg/Kg	
	SILVER	J	0.0357	0.108	PQL	mg/Kg	
SL-115-SA5B-SB-4.0-5.0	SELENIUM	J	0.105	0.425	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0257	0.106	PQL	mg/Kg	
SL-116-SA5B-SB-4.0-5.0	ANTIMONY	J	0.174	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.125	0.450	PQL	mg/Kg	
	SILVER	J	0.0266	0.113	PQL	mg/Kg	
SL-118-SA5B-SB-4.0-5.0	ANTIMONY	J	0.139	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0859	0.113	PQL	mg/Kg	
	SELENIUM	J	0.197	0.452	PQL	mg/Kg	
	SILVER	J	0.0508	0.113	PQL	mg/Kg	
SL-118-SA5B-SB-8.0-9.0	ANTIMONY	J	0.180	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0755	0.440	PQL	mg/Kg	
SL-280-SA5B-SB-4.0-5.0	ANTIMONY	J	0.160	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0733	0.110	PQL	mg/Kg	
	SELENIUM	J	0.117	0.441	PQL	mg/Kg	
	SILVER	J	0.0281	0.110	PQL	mg/Kg	
SL-280-SA5B-SB-9.0-10	SELENIUM	J	0.138	0.469	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0454	0.117	PQL	mg/Kg	
SL-283-SA5B-SB-4.0-5.0	ANTIMONY	J	0.206	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.112	0.437	PQL	mg/Kg	
	SILVER	J	0.0197	0.109	PQL	mg/Kg	
SL-283-SA5B-SB-9.0-10.0	ANTIMONY	J	0.151	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.444	PQL	mg/Kg	
	SILVER	J	0.0271	0.111	PQL	mg/Kg	
SL-295-SA5B-SB-4.0-5.0	ANTIMONY	J	0.139	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.448	PQL	mg/Kg	
	SILVER	J	0.0355	0.112	PQL	mg/Kg	
SL-295-SA5B-SB-9.0-10	SELENIUM	J	0.168	0.463	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0409	0.116	PQL	mg/Kg	
SL-296-SA5B-SB-4.0-5.0	ANTIMONY	J	0.213	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.170	0.439	PQL	mg/Kg	
	SILVER	J	0.0252	0.110	PQL	mg/Kg	
SL-296-SA5B-SB-9.0-10.0	ANTIMONY	J	0.0919	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.124	0.432	PQL	mg/Kg	
	SILVER	J	0.0222	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-115-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-118-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-280-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-280-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)
SL-283-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-283-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-295-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-295-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.63	1.2	PQL	mg/Kg	J (all detects)
SL-296-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)
SL-296-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	MERCURY	J	0.0085	0.102	PQL	mg/Kg	J (all detects)
SL-115-SA5B-SB-4.0-5.0	MERCURY	J	0.0047	0.104	PQL	mg/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	MERCURY	J	0.0059	0.111	PQL	mg/Kg	J (all detects)
SL-118-SA5B-SB-4.0-5.0	MERCURY	J	0.0113	0.113	PQL	mg/Kg	J (all detects)
SL-118-SA5B-SB-8.0-9.0	MERCURY	J	0.0195	0.105	PQL	mg/Kg	J (all detects)
SL-280-SA5B-SB-4.0-5.0	MERCURY	J	0.0083	0.109	PQL	mg/Kg	J (all detects)
SL-280-SA5B-SB-9.0-10	MERCURY	J	0.0047	0.113	PQL	mg/Kg	J (all detects)
SL-283-SA5B-SB-4.0-5.0	MERCURY	J	0.0103	0.111	PQL	mg/Kg	J (all detects)
SL-283-SA5B-SB-9.0-10.0	MERCURY	J	0.0142	0.110	PQL	mg/Kg	J (all detects)
SL-295-SA5B-SB-4.0-5.0	MERCURY	J	0.0054	0.108	PQL	mg/Kg	J (all detects)
SL-295-SA5B-SB-9.0-10	MERCURY	J	0.0740	0.116	PQL	mg/Kg	J (all detects)
SL-296-SA5B-SB-4.0-5.0	MERCURY	J	0.0086	0.105	PQL	mg/Kg	J (all detects)
SL-296-SA5B-SB-9.0-10.0	MERCURY	J	0.0137	0.107	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	METHANOL	J	280	540	PQL	ug/Kg	J (all detects)
SL-115-SA5B-SB-4.0-5.0	METHANOL	J	260	550	PQL	ug/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	METHANOL	J	280	570	PQL	ug/Kg	J (all detects)
SL-118-SA5B-SB-4.0-5.0	METHANOL	J	400	570	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE063 | Laboratory: LL

EDD Filename: DE063_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-118-SA5B-SB-8.0-9.0	METHANOL	J	350	560	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	2.3	6.5	PQL	mg/Kg	J (all detects)
SL-115-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.55	1.3	PQL	mg/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	EFH (C15-C20) EFH (C21-C30)	J J	0.50 1.3	1.4 1.4	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-118-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	0.75	1.4	PQL	mg/Kg	J (all detects)
SL-118-SA5B-SB-8.0-9.0	EFH (C21-C30) EFH (C30-C40)	J J	0.51 0.47	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	AROCLOR 1260	J	1.1	1.8	PQL	ug/Kg	J (all detects)
SL-115-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.57	1.9	PQL	ug/Kg	J (all detects)
SL-283-SA5B-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	2.1 1.5	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-283-SA5B-SB-9.0-10.0	AROCLOR 1254	J	3.7	3.8	PQL	ug/Kg	J (all detects)
SL-295-SA5B-SB-9.0-10	AROCLOR 1254	J	0.85	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.37	4.4	PQL	ug/Kg	J (all detects)
SL-115-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.37	4.0	PQL	ug/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.40	4.0	PQL	ug/Kg	J (all detects)
SL-118-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.41	4.5	PQL	ug/Kg	J (all detects)
SL-118-SA5B-SB-8.0-9.0	METHYLENE CHLORIDE	J	0.42	4.4	PQL	ug/Kg	J (all detects)
SL-280-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.40	4.0	PQL	ug/Kg	J (all detects)
SL-283-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.43	3.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE063 Laboratory: LL

EDD Filename: DE063_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-295-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.43	4.0	PQL	ug/Kg	J (all detects)
SL-296-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.44	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-283-SA5B-SB-4.0-5.0	FLUORANTHENE	J	21	190	PQL	ug/Kg	J (all detects)
	PYRENE	J	27	190	PQL	ug/Kg	
SL-296-SA5B-SB-9.0-10.0	ANTHRACENE	J	19	180	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	97	180	PQL	ug/Kg	
	BENZO(A)PYRENE	J	43	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	54	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	23	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	29	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	
	CHRYSENE	J	84	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	19	180	PQL	ug/Kg	
	PHENANTHRENE	J	66	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5B-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	20	PQL	ug/Kg	
	CHRYSENE	J	0.64	1.8	PQL	ug/Kg	
SL-115-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.3	20	PQL	ug/Kg	J (all detects)
SL-116-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	
SL-118-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	21	PQL	ug/Kg	J (all detects)
SL-118-SA5B-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	20	PQL	ug/Kg	J (all detects)
SL-280-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.84	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	
SL-280-SA5B-SB-9.0-10	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.2	21	PQL	ug/Kg	J (all detects)
SL-283-SA5B-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	0.82	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.9	20	PQL	ug/Kg	
	CHRYSENE	J	0.59	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	12	20	PQL	ug/Kg	
SL-283-SA5B-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.0	20	PQL	ug/Kg	
	CHRYSENE	J	0.44	1.9	PQL	ug/Kg	
SL-295-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE063 **Laboratory: LL**

EDD Filename: DE063_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-295-SA5B-SB-9.0-10	BENZO(B)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	21	PQL	ug/Kg	
	NAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	
SL-296-SA5B-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	0.87	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	20	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.99	1.8	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-296-SA5B-SB-9.0-10.0	DIBENZO(A,H)ANTHRACENE	J	0.79	1.8	PQL	ug/Kg	J (all detects)

LDC #: 25750N4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/14
SDG #: DE063 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CO
2nd Reviewer: C

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, P, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Hg, Se, Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (Co: 13%, Cu: 16%)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-296-SA5B-SB-4.0-5.0	11	SL-280-SA5B-SB-9.0-10.0	21		31	
2	SL-296-SA5B-SB-9.0-10.0	12	SL-115-SA5B-SB-4.0-5.0	22		32	
3	SL-295-SA5B-SB-4.0-5.0	13	SL-114-SA5B-SB-4.0-5.0	23		33	
4	SL-295-SA5B-SB-9.0-10.0	14	(x1) MS	24		34	
5	SL-118-SA5B-SB-4.0-5.0	15	MSD	25		35	
6	SL-118-SA5B-SB-8.0-9.0	16	DUP	26		36	
7	SL-116-SA5B-SB-4.0-5.0	17		27		37	
8	SL-283-SA5B-SB-4.0-5.0	18		28		38	
9	SL-283-SA5B-SB-9.0-10.0	19		29		39	
10	SL-280-SA5B-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 25750N 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

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				
Sb			0.38	0.38	0.21	0.092	0.14	0.37	0.14	0.18	0.17	0.21	0.15	0.16	0.28	0.30	0.12				
Zr			8.3	4.15	4.0	3.8			3.7		3.8			3.7		3.4	3.5				

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.

SAMPLE DELIVERY GROUP

DE064

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-Jan-2011	TB-011911	6186950	TB	5030B	8015M	III
19-Jan-2011	TB-011911	6186950	TB	5030B	8260B	III
19-Jan-2011	TB-011911	6186950	TB	5030B	8260B SIM	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	3050B	6010B	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	3050B	6020	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	3060A	7199	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	3550B	8082	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	3550B	8270C	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	3550B	8270C SIM	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	5035	8260B	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	5035	8260B SIM	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	Gen Prep	9045M	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	METHOD	300.0	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	METHOD	314.0	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0	6186937	N	METHOD	7471A	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0DUP	P186937D270706A	DUP	METHOD	314.0	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0DUP	P186937D271158A	DUP	METHOD	300.0	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0DUP	P186937D291030B	DUP	Gen Prep	9045M	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0MSD	P186937M240447A	MSD	3550B	8082	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0MSD	P186937M261304	MSD	3550B	8270C	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0MS	P186937R240428A	MS	3550B	8082	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0MS	P186937R261229	MS	3550B	8270C	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0MS	P186937R270729A	MS	METHOD	314.0	III
19-Jan-2011	SL-025-SA5B-SB-4.0-5.0MS	P186937R271213A	MS	METHOD	300.0	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	3050B	6010B	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	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
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	3060A	7199	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	3550B	8082	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	3550B	8270C	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	3550B	8270C SIM	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	Gen Prep	9045M	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	METHOD	300.0	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	METHOD	314.0	III
19-Jan-2011	SL-025-SA5B-SB-9.0-10.0	6186938	N	METHOD	7471A	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	3050B	6010B	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	3050B	6020	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	3060A	7199	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	3550B	8082	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	3550B	8270C	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	3550B	8270C SIM	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	5035	8260B	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	5035	8260B SIM	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	Gen Prep	9045M	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	METHOD	300.0	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	METHOD	314.0	III
19-Jan-2011	SL-048-SA5B-SB-4.0-5.0	6186939	N	METHOD	7471A	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	3050B	6010B	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	3050B	6020	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	3060A	7199	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	3550B	8082	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	3550B	8270C	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	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
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	Gen Prep	9045M	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	METHOD	300.0	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	METHOD	314.0	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10	6186940	N	METHOD	7471A	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10MSD	P186940M260526	MSD	3550B	8270C SIM	III
19-Jan-2011	SL-048-SA5B-SB-9.0-10MS	P186940R260454	MS	3550B	8270C SIM	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	3050B	6010B	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	3050B	6020	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	3060A	7199	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	3550B	8082	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	3550B	8270C	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	3550B	8270C SIM	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	5035	8260B	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	5035	8260B SIM	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	Gen Prep	9045M	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	METHOD	300.0	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	METHOD	314.0	III
19-Jan-2011	SL-024-SA5B-SB-4.0-5.0	6186941	N	METHOD	7471A	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	3050B	6010B	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	3050B	6020	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	3060A	7199	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	3550B	8082	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	3550B	8270C	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	3550B	8270C SIM	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	Gen Prep	9045M	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	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
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	METHOD	314.0	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10	6186942	N	METHOD	7471A	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10DUP	P186942D271309A	DUP	3060A	7199	III
19-Jan-2011	SL-024-SA5B-SB-9.0-10MS	P186942R271219A	MS	3060A	7199	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	3050B	6010B	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	3060A	7199	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	3550B	8082	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	3550B	8270C	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	3550B	8270C SIM	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	5035	8260B	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	5035	8260B SIM	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	Gen Prep	9045M	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	METHOD	300.0	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	METHOD	314.0	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	METHOD	6850	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0	6186944	N	METHOD	7471A	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D220512A	DUP	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D221858	DUP	METHOD	7471A	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D221952	DUP	3050B	6010B	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D222131A	DUP	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D222131B	DUP	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D222131C	DUP	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0DUP	P186944D222131D	DUP	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M220102A	MSD	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M220516A	MSD	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
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M221901	MSD	METHOD	7471A	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M222000	MSD	3050B	6010B	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M222138A	MSD	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M222138B	MSD	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M222138C	MSD	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MSD	P186944M222138D	MSD	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R220514A	MS	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R221859	MS	METHOD	7471A	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R221956	MS	3050B	6010B	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R222134A	MS	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R222134B	MS	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R222134C	MS	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-4.0-5.0MS	P186944R222134D	MS	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	3050B	6010B	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	3050B	6020	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	3060A	7199	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	3550B	8082	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	3550B	8270C	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	3550B	8270C SIM	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	Gen Prep	9045M	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	METHOD	300.0	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	METHOD	314.0	III
19-Jan-2011	SL-287-SA5B-SB-9.0-10.0	6186945	N	METHOD	7471A	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3050B	6010B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3050B	6020	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	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
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3546	1625C	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3550B	8015B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3550B	8015M	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3550B	8082	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3550B	8270C	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	3550B	8270C SIM	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	5035	8015M	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	5035	8260B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	5035	8260B SIM	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	8330	8330A	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	Gen Prep	9045M	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	300.0	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	314.0	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	7471A	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	8015B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	8015M	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	8315A	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0	6186943	N	METHOD	9012B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0MSD	P186943M320253A	MSD	3550B	8015B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0MSD	P186943M320946A	MSD	3550B	8015M	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0MS	P186943R320208A	MS	3550B	8015B	III
19-Jan-2011	SL-022-SA5B-SB-2.0-3.0MS	P186943R320921A	MS	3550B	8015M	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3050B	6010B	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3050B	6020	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3060A	7199	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3546	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
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3550B	8015B	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3550B	8015M	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3550B	8082	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3550B	8270C	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	3550B	8270C SIM	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	5035	8015M	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	5035	8260B	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	5035	8260B SIM	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	8330	8330A	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	Gen Prep	9045M	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	300.0	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	314.0	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	7471A	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	8015B	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	8015M	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	8315A	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10	6186947	N	METHOD	9012B	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10DUP	P186947D271537B	DUP	METHOD	300.0	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10DUP	P186947D271849B	DUP	METHOD	314.0	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10MS	P186947R271553B	MS	METHOD	300.0	III
19-Jan-2011	SL-049-SA5B-SB-9.0-10MS	P186947R271912B	MS	METHOD	314.0	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	3050B	6010B	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	3050B	6020	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	3060A	7199	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	3550B	8082	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	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
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	3550B	8270C SIM	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	5035	8260B	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	5035	8260B SIM	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	Gen Prep	9045M	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	METHOD	300.0	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	METHOD	314.0	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0	6186948	N	METHOD	7471A	III
19-Jan-2011	SL-031-SA5B-SB-4.0-5.0DUP	P186948D291230A	DUP	Gen Prep	9045M	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3050B	6010B	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3050B	6020	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3060A	7199	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3546	1625C	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3550B	8015B	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3550B	8015M	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3550B	8082	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3550B	8270C	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	3550B	8270C SIM	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	5035	8015M	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	5035	8260B	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	5035	8260B SIM	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	8330	8330A	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	Gen Prep	9045M	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	METHOD	300.0	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	METHOD	314.0	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	METHOD	7471A	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	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
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	METHOD	8015M	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	METHOD	8315A	III
19-Jan-2011	SL-049-SA5B-SB-4.0-5.0	6186946	N	METHOD	9012B	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	3050B	6010B	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	3050B	6020	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	3060A	7199	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	3550B	8082	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	3550B	8270C	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	3550B	8270C SIM	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	Gen Prep	9045M	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	METHOD	300.0	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	N	METHOD	314.0	III
19-Jan-2011	SL-031-SA5B-SB-9.0-10.0	6186949	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: DE064 Laboratory: LL

EDD Filename: PrepDE064_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 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	2.8		0.82	MDL	1.0	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
FLUORIDE	6.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 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	5.5		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
FLUORIDE	1.9		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
FLUORIDE	4.9		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
FLUORIDE	5.1		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.87	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.4	J	0.83	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-287-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 1:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.84	MDL	1.0	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 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
POTASSIUM	3010		17.9	MDL	49.8	PQL	mg/Kg	J	Q
TIN	2.68	J	0.997	MDL	9.97	PQL	mg/Kg	U	B
Zirconium	2.39	J	0.837	MDL	4.98	PQL	mg/Kg	U	B

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
POTASSIUM	1590		19.9	MDL	55.2	PQL	mg/Kg	J	Q
TIN	2.75	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.83	J	0.928	MDL	5.52	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory:** LL

EDD Filename: PrepDE064_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 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
POTASSIUM	2620		19.2	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.49	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.97	J	0.898	MDL	5.35	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
POTASSIUM	2900		19.3	MDL	53.5	PQL	mg/Kg	J	Q
TIN	2.47	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.94	J	0.899	MDL	5.35	PQL	mg/Kg	U	B

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
POTASSIUM	2680		19.4	MDL	53.9	PQL	mg/Kg	J	Q
TIN	2.39	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.72	J	0.906	MDL	5.39	PQL	mg/Kg	U	B

Sample ID: SL-031-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 3:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.37	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
MANGANESE	425		0.0883	MDL	0.566	PQL	mg/Kg	J	Q, E
PHOSPHORUS	228		0.634	MDL	11.3	PQL	mg/Kg	J	Q
TIN	2.53	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.79	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 4:05:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.02	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
MANGANESE	272		0.0831	MDL	0.533	PQL	mg/Kg	J	Q, E
PHOSPHORUS	347		0.597	MDL	10.7	PQL	mg/Kg	J	Q
TIN	2.85	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.60	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory:** LL

EDD Filename: PrepDE064_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-048-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 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
POTASSIUM	2440		20.0	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.37	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.85	J	0.936	MDL	5.57	PQL	mg/Kg	U	B

Sample ID: SL-048-SA5B-SB-9.0-10 ***Collected:*** 1/19/2011 10:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3720		18.7	MDL	51.9	PQL	mg/Kg	J	Q
TIN	2.48	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.81	J	0.871	MDL	5.19	PQL	mg/Kg	U	B

Sample ID: SL-049-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 4:04:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.21	J	0.969	MDL	5.45	PQL	mg/Kg	J	Z
MANGANESE	260		0.0850	MDL	0.545	PQL	mg/Kg	J	Q, E
PHOSPHORUS	271		0.610	MDL	10.9	PQL	mg/Kg	J	Q
SODIUM	80.5	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.52	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.31	J	0.915	MDL	5.45	PQL	mg/Kg	U	B

Sample ID: SL-049-SA5B-SB-9.0-10 ***Collected:*** 1/19/2011 3:44:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	92.5		0.0776	MDL	0.498	PQL	mg/Kg	J	Q, E
PHOSPHORUS	314		0.557	MDL	9.95	PQL	mg/Kg	J	Q
SODIUM	77.4	J	37.1	MDL	99.5	PQL	mg/Kg	J	Z
TIN	1.24	J	0.995	MDL	9.95	PQL	mg/Kg	U	B
Zirconium	2.62	J	0.836	MDL	4.98	PQL	mg/Kg	U	B

Sample ID: SL-287-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 1:49:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.47	J	0.958	MDL	5.38	PQL	mg/Kg	J	Z
MANGANESE	213		0.0840	MDL	0.538	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-287-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 1:49:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	258		0.603	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.80	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.904	MDL	5.38	PQL	mg/Kg	U	B

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	258		0.0806	MDL	0.517	PQL	mg/Kg	J	Q, E
PHOSPHORUS	367		0.579	MDL	10.3	PQL	mg/Kg	J	Q
TIN	2.41	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.32	J	0.868	MDL	5.17	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 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	0.0683	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 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
ANTIMONY	0.0787	J	0.0604	MDL	0.201	PQL	mg/Kg	UJ	B, Q
LEAD	3.45		0.0105	MDL	0.201	PQL	mg/Kg	J	Q

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 11:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0569	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 11:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0676	MDL	0.225	PQL	mg/Kg	UJ	B, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory:** LL

EDD Filename: PrepDE064_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 11:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.99		0.0117	MDL	0.225	PQL	mg/Kg	J	Q
SILVER	0.0398	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 11:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0915	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 11:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0817	J	0.0648	MDL	0.216	PQL	mg/Kg	UJ	B, Q
LEAD	4.77		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
SILVER	0.0241	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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	0.105	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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	0.0993	J	0.0630	MDL	0.210	PQL	mg/Kg	UJ	B, Q
LEAD	5.66		0.0109	MDL	0.210	PQL	mg/Kg	J	Q
SILVER	0.0302	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 9:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0956	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 9:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0641	MDL	0.214	PQL	mg/Kg	UJ	B, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: PrepDE064_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 9:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.88		0.0111	MDL	0.214	PQL	mg/Kg	J	Q
SILVER	0.0362	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 3:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0743	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, B
SILVER	0.0232	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 3:50:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 4:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0807	J	0.0639	MDL	0.213	PQL	mg/Kg	UJ	Q, B
SILVER	0.0256	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 4:05:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 10:39:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0887	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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	0.104	J	0.0668	MDL	0.223	PQL	mg/Kg	UJ	B, Q
CADMIUM	0.0796	J	0.0445	MDL	0.111	PQL	mg/Kg	J	Z
LEAD	4.01		0.0116	MDL	0.223	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory:** LL

EDD Filename: PrepDE064_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-048-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
SILVER	0.0137	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0734	J	0.0628	MDL	0.209	PQL	mg/Kg	UJ	B, Q
LEAD	5.59		0.0109	MDL	0.209	PQL	mg/Kg	J	Q
SILVER	0.0289	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0713	J	0.0641	MDL	0.214	PQL	mg/Kg	UJ	Q, B
SILVER	0.0235	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0584	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0609	U	0.0609	MDL	0.203	PQL	mg/Kg	UJ	Q
CADMIUM	0.0667	J	0.0406	MDL	0.101	PQL	mg/Kg	J	Z
THALLIUM	0.0449	J	0.0304	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.101	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: PrepDE064_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-287-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 1:49:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.181	J	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, B
CADMIUM	0.0590	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z
SILVER	0.0224	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-287-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 1:49:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0878	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	J	0.0608	MDL	0.203	PQL	mg/Kg	UJ	Q, B
SILVER	0.0164	J	0.0122	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0590	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
HEXAVALENT CHROMIUM	0.25	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 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
HEXAVALENT CHROMIUM	0.30	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: PrepDE064_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
HEXAVALENT CHROMIUM	0.49	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 3:50:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-031-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *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	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.24	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

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

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
MERCURY	0.0037	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: PrepDE064_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 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
MERCURY	0.0370	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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	0.0053	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
MERCURY	0.0053	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0124	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *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	19.1	J	18.2	MDL	36.3	PQL	ng/Kg	U	B

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *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	18.1	J	17.3	MDL	34.5	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 2:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C8-C11)	0.41	U	0.41	MDL	1.2	PQL	mg/Kg	UJ	Q

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *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)	2.7		0.41	MDL	1.2	PQL	mg/Kg	U	B
EFH (C30-C40)	9.2		0.41	MDL	1.2	PQL	mg/Kg	U	B

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 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 1254	1.2	J	0.34	MDL	1.7	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.8	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-031-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 3:50:00 *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 1254	1.2	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-031-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-048-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *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	2.4		0.42	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *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	2.1		0.40	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.9	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-287-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 1:49:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: PrepDE064_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	Q
N-NITROSODIPHENYLAMINE	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *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	44	J	17	MDL	350	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM Matrix: SO

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 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
NAPHTHALENE	4.0		0.68	MDL	1.7	PQL	ug/Kg	U	B

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 11:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	3.0		0.76	MDL	1.9	PQL	ug/Kg	U	B

Sample ID: SL-024-SA5B-SB-9.0-10 *Collected:* 1/19/2011 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
NAPHTHALENE	2.7		0.73	MDL	1.8	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
NAPHTHALENE	2.9		0.73	MDL	1.8	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 9:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory:** LL

EDD Filename: PrepDE064_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-025-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 9:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	9.3	J	6.7	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	2.3		0.74	MDL	1.9	PQL	ug/Kg	U	B

Sample ID: SL-031-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 3:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	2.3		0.77	MDL	1.9	PQL	ug/Kg	U	B
PYRENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-031-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 4:05:00 *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	1.9		0.72	MDL	1.8	PQL	ug/Kg	U	B

Sample ID: SL-048-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 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
CHRYSENE	0.43	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	3.0		0.75	MDL	1.9	PQL	ug/Kg	U	B

Sample ID: SL-048-SA5B-SB-9.0-10 *Collected:* 1/19/2011 10:44:00 *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(B)FLUORANTHENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	2.5		0.72	MDL	1.8	PQL	ug/Kg	U	B

Sample ID: SL-049-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 4:04:00 *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(B)FLUORANTHENE	0.87	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.6	J	6.5	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.52	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	3.4		0.73	MDL	1.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-049-SA5B-SB-9.0-10 *Collected:* 1/19/2011 3:44:00 *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	2.0		0.69	MDL	1.7	PQL	ug/Kg	U	B

Sample ID: SL-287-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 1:49:00 *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	2.2		0.75	MDL	1.9	PQL	ug/Kg	U	B

Sample ID: SL-287-SA5B-SB-9.0-10.0 *Collected:* 1/19/2011 1:53:00 *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(B)FLUORANTHENE	1.5	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	2.6		0.70	MDL	1.7	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-022-SA5B-SB-2.0-3.0 *Collected:* 1/19/2011 2:10:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.93	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-024-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 11:25:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.64	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-025-SA5B-SB-4.0-5.0 *Collected:* 1/19/2011 9:50:00 *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	0.68	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: SL-031-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 3:50:00 ***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	0.61	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-048-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 10:39:00 ***Analysis Type:*** RES ***Dilution:*** 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.70	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-049-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 4:04:00 ***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	0.96	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-049-SA5B-SB-9.0-10 ***Collected:*** 1/19/2011 3:44:00 ***Analysis Type:*** RES ***Dilution:*** 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.2	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-287-SA5B-SB-4.0-5.0 ***Collected:*** 1/19/2011 1:49:00 ***Analysis Type:*** RES ***Dilution:*** 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.56	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: PrepDE064_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE064

Method Blank Outlier Report

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: DE064_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLE02B260743	1/30/2011 7:43:00 AM	N-NITROSODIMETHYLAMINE	22.9 ng/Kg	SL-022-SA5B-SB-2.0-3.0 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10

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-049-SA5B-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	19.1 ng/Kg	36.3U ng/Kg
SL-049-SA5B-SB-9.0-10(RES)	N-NITROSODIMETHYLAMINE	18.1 ng/Kg	34.5U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02108BB221254	1/25/2011 12:54:00 PM	IRON	6.17 mg/Kg	SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-024-SA5B-SB-9.0-10 SL-025-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-9.0-10.0 SL-048-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-9.0-10
P02108BB222343	1/24/2011 11:43:00 PM	PHOSPHORUS TIN	1.61 mg/Kg 1.05 mg/Kg	SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-024-SA5B-SB-9.0-10 SL-025-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-9.0-10.0 SL-048-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-9.0-10
P02408BB221932	1/25/2011 7:32:00 PM	PHOSPHORUS TIN	1.69 mg/Kg 1.33 mg/Kg	SL-031-SA5B-SB-4.0-5.0 SL-031-SA5B-SB-9.0-10.0 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10 SL-287-SA5B-SB-4.0-5.0 SL-287-SA5B-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
SL-022-SA5B-SB-2.0-3.0(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-024-SA5B-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-024-SA5B-SB-9.0-10(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-025-SA5B-SB-4.0-5.0(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-025-SA5B-SB-9.0-10.0(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-031-SA5B-SB-4.0-5.0(REA2)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-031-SA5B-SB-9.0-10.0(REA2)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-048-SA5B-SB-4.0-5.0(RES)	TIN	2.37 mg/Kg	2.37U mg/Kg
SL-048-SA5B-SB-9.0-10(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-049-SA5B-SB-4.0-5.0(REA2)	TIN	2.52 mg/Kg	2.52U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: DE064_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
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-049-SA5B-SB-9.0-10(REA2)	TIN	1.24 mg/Kg	1.24U mg/Kg
SL-287-SA5B-SB-4.0-5.0(REA2)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-287-SA5B-SB-9.0-10.0(REA2)	TIN	2.41 mg/Kg	2.41U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02426AB222119A	1/31/2011 9:19:00 PM	LEAD	0.0159 mg/Kg	SL-031-SA5B-SB-4.0-5.0 SL-031-SA5B-SB-9.0-10.0 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10 SL-287-SA5B-SB-4.0-5.0 SL-287-SA5B-SB-9.0-10.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P25259AB320806A	1/28/2011 8:06:00 AM	EFH (C21-C30)	0.50 mg/Kg	SL-022-SA5B-SB-2.0-3.0 SL-049-SA5B-SB-4.0-5.0
P31315AB320112A	2/2/2011 1:12:00 AM	EFH (C21-C30) EFH (C30-C40)	2.5 mg/Kg 8.7 mg/Kg	SL-049-SA5B-SB-9.0-10

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-049-SA5B-SB-9.0-10(REA2)	EFH (C21-C30)	2.7 mg/Kg	2.7U mg/Kg
SL-049-SA5B-SB-9.0-10(REA2)	EFH (C30-C40)	9.2 mg/Kg	9.2U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: DE064_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB55B211454A	1/24/2011 2:54:00 PM	METHYLENE CHLORIDE TOLUENE	0.50 ug/Kg 0.25 ug/Kg	SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-4.0-5.0 SL-031-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10 SL-287-SA5B-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-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.93 ug/Kg	4.1U ug/Kg
SL-024-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.64 ug/Kg	4.1U ug/Kg
SL-025-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.68 ug/Kg	4.0U ug/Kg
SL-025-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	4.0U ug/Kg
SL-031-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.61 ug/Kg	3.9U ug/Kg
SL-048-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.70 ug/Kg	4.2U ug/Kg
SL-049-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.96 ug/Kg	4.2U ug/Kg
SL-049-SA5B-SB-9.0-10(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.0U ug/Kg
SL-287-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.3U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLA02B261849	1/26/2011 6:49:00 PM	NAPHTHALENE	2.1 ug/Kg	SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-024-SA5B-SB-9.0-10 SL-025-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-9.0-10.0 SL-031-SA5B-SB-4.0-5.0 SL-031-SA5B-SB-9.0-10.0 SL-048-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-9.0-10 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10 SL-287-SA5B-SB-4.0-5.0 SL-287-SA5B-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
SL-022-SA5B-SB-2.0-3.0(RES)	NAPHTHALENE	4.0 ug/Kg	4.0U ug/Kg
SL-024-SA5B-SB-4.0-5.0(RES)	NAPHTHALENE	3.0 ug/Kg	3.0U ug/Kg
SL-024-SA5B-SB-9.0-10(RES)	NAPHTHALENE	2.7 ug/Kg	2.7U ug/Kg
SL-025-SA5B-SB-4.0-5.0(RES)	NAPHTHALENE	2.9 ug/Kg	2.9U ug/Kg
SL-025-SA5B-SB-9.0-10.0(RES)	NAPHTHALENE	2.3 ug/Kg	2.3U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: DE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**
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-031-SA5B-SB-4.0-5.0(RES)	NAPHTHALENE	2.3 ug/Kg	2.3U ug/Kg
SL-031-SA5B-SB-9.0-10.0(RES)	NAPHTHALENE	1.9 ug/Kg	1.9U ug/Kg
SL-048-SA5B-SB-4.0-5.0(RES)	NAPHTHALENE	3.0 ug/Kg	3.0U ug/Kg
SL-048-SA5B-SB-9.0-10(RES)	NAPHTHALENE	2.5 ug/Kg	2.5U ug/Kg
SL-049-SA5B-SB-4.0-5.0(RES)	NAPHTHALENE	3.4 ug/Kg	3.4U ug/Kg
SL-049-SA5B-SB-9.0-10(RES)	NAPHTHALENE	2.0 ug/Kg	2.0U ug/Kg
SL-287-SA5B-SB-4.0-5.0(RES)	NAPHTHALENE	2.2 ug/Kg	2.2U ug/Kg
SL-287-SA5B-SB-9.0-10.0(RES)	NAPHTHALENE	2.6 ug/Kg	2.6U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: DE064_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-048-SA5B-SB-9.0-10MSD (SL-048-SA5B-SB-9.0-10)	BIS(2-ETHYLHEXYL)PHTHALAT Di-n-octylphthalate	- -	- 194	39.00-167.00 40.00-192.00	40 (30.00) -	BIS(2-ETHYLHEXYL)PHTHALA Di-n-octylphthalate	J (all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-287-SA5B-SB-4.0-5.0MS SL-287-SA5B-SB-4.0-5.0MSD (SL-031-SA5B-SB-4.0-5.0 SL -031-SA5B-SB-9.0-10.0 SL -049-SA5B-SB-4.0-5.0 SL -049-SA5B-SB-9.0-10 SL -287-SA5B-SB-4.0-5.0 SL -287-SA5B-SB-9.0-10.0)	ANTIMONY	41	36	75.00-125.00	-	ANTIMONY	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-287-SA5B-SB-4.0-5.0MS SL-287-SA5B-SB-4.0-5.0MSD (SL-031-SA5B-SB-4.0-5.0 SL -031-SA5B-SB-9.0-10.0 SL -049-SA5B-SB-4.0-5.0 SL -049-SA5B-SB-9.0-10 SL -287-SA5B-SB-4.0-5.0 SL -287-SA5B-SB-9.0-10.0)	ALUMINUM CALCIUM MAGNESIUM MANGANESE PHOSPHORUS TITANIUM	1680 198 287 132 135 239	1298 - 227 - 127 194	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM MAGNESIUM MANGANESE PHOSPHORUS TITANIUM	J(all detects) Al, Ca, Mg, Ti No Qual, >4x
SL-287-SA5B-SB-4.0-5.0MS SL-287-SA5B-SB-4.0-5.0MSD (SL-031-SA5B-SB-4.0-5.0 SL -031-SA5B-SB-9.0-10.0 SL -049-SA5B-SB-4.0-5.0 SL -049-SA5B-SB-9.0-10 SL -287-SA5B-SB-4.0-5.0 SL -287-SA5B-SB-9.0-10.0)	IRON	254	-393	75.00-125.00	-	IRON	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-025-SA5B-SB-4.0-5.0MS SL-025-SA5B-SB-4.0-5.0MSD (SL-025-SA5B-SB-4.0-5.0)	BENZIDINE N-NITROSODIPHENYLAMINE	22 84	19 -	35.00-141.00 86.00-145.00	- -	BENZIDINE N-NITROSODIPHENYLAMINE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: DE064_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-025-SA5B-SB-4.0-5.0MS (SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-024-SA5B-SB-9.0-10 SL-025-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-9.0-10.0 SL-048-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-9.0-10 SL-049-SA5B-SB-4.0-5.0 SL-287-SA5B-SB-4.0-5.0 SL-287-SA5B-SB-9.0-10.0)	FLUORIDE	75	-	80.00-120.00	-	FLUORIDE	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-022-SA5B-SB-2.0-3.0MS SL-022-SA5B-SB-2.0-3.0MSD (SL-022-SA5B-SB-2.0-3.0)	EFH (C21-C30) EFH (C30-C40)	151 -	- -	49.00-123.00 49.00-123.00	32 (20.00) 21 (20.00)	EFH (C21-C30) EFH (C30-C40)	J(all detects)
SL-022-SA5B-SB-2.0-3.0MSD (SL-022-SA5B-SB-2.0-3.0)	EFH (C8-C11)	-	48	49.00-123.00	-	EFH (C8-C11)	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: DE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-287-SA5B-SB-4.0-5.0DUP (SL-031-SA5B-SB-4.0-5.0 SL -031-SA5B-SB-9.0-10.0 SL -049-SA5B-SB-4.0-5.0 SL -049-SA5B-SB-9.0-10 SL -287-SA5B-SB-4.0-5.0 SL -287-SA5B-SB-9.0-10.0)	MANGANESE	29	20.00	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-287-SA5B-SB-4.0-5.0DUP (SL-031-SA5B-SB-4.0-5.0 SL -031-SA5B-SB-9.0-10.0 SL -049-SA5B-SB-4.0-5.0 SL -049-SA5B-SB-9.0-10 SL -287-SA5B-SB-4.0-5.0 SL -287-SA5B-SB-9.0-10.0)	ANTIMONY SILVER	68 200	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-024-SA5B-SB-9.0-10DUP (SL-022-SA5B-SB-2.0-3.0 SL -024-SA5B-SB-4.0-5.0 SL -024-SA5B-SB-9.0-10 SL -025-SA5B-SB-4.0-5.0 SL -025-SA5B-SB-9.0-10.0 SL -031-SA5B-SB-4.0-5.0 SL -031-SA5B-SB-9.0-10.0 SL -048-SA5B-SB-4.0-5.0 SL -048-SA5B-SB-9.0-10 SL -049-SA5B-SB-4.0-5.0 SL -049-SA5B-SB-9.0-10 SL -287-SA5B-SB-4.0-5.0 SL -287-SA5B-SB-9.0-10.0)	HEXAVALENT CHROMIUM	52	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: DE064_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
P02126AQ222341A (SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-024-SA5B-SB-9.0-10 SL-025-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-9.0-10.0 SL-048-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-9.0-10)	ANTIMONY	124	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10241AQ242122A P10241AY242103A (SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-024-SA5B-SB-9.0-10 SL-025-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-9.0-10.0 SL-031-SA5B-SB-4.0-5.0 SL-031-SA5B-SB-9.0-10.0 SL-048-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-9.0-10 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10 SL-287-SA5B-SB-4.0-5.0 SL-287-SA5B-SB-9.0-10.0)	Aroclor 5442	57	61	75.00-125.00	-	Aroclor 5423, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B55Q211516A (SL-022-SA5B-SB-2.0-3.0 SL-024-SA5B-SB-4.0-5.0 SL-025-SA5B-SB-4.0-5.0 SL-031-SA5B-SB-4.0-5.0 SL-048-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-4.0-5.0 SL-049-SA5B-SB-9.0-10 SL-287-SA5B-SB-4.0-5.0)	Chlorotrifluoroethylene	158	-	22.00-131.00	-	Chlorotrifluoroethylene	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: DE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-022-SA5B-SB-2.0-3.0	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J (all detects)
SL-024-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	123	45.00-120.00	All Target Analytes	J(all detects)
SL-025-SA5B-SB-9.0-10.0	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
SL-031-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	J(all detects)
SL-031-SA5B-SB-9.0-10.0	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J(all detects)
SL-048-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-048-SA5B-SB-9.0-10	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J(all detects)
SL-049-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	124	45.00-120.00	All Target Analytes	J(all detects)
SL-049-SA5B-SB-9.0-10	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J(all detects)
SL-287-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	124	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-048-SA5B-SB-4.0-5.0	2,4,6-TRIBROMOPHENOL	232	35.00-130.00	All Target Analytes	J(all detects)
	2-FLUOROBIPHENYL	180	45.00-130.00		
	2-FLUOROPHENOL	164	25.00-130.00		
	Nitrobenzene-d5	157	40.00-130.00		
	PHENOL-D6	167	25.00-120.00		
	Terphenyl-d14	194	45.00-135.00		

Reporting Limit Outliers

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: DE064_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	19.1	36.3	PQL	ng/Kg	J (all detects)
SL-049-SA5B-SB-9.0-10	N-NITROSODIMETHYLAMINE	J	18.1	34.5	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.4	1.6	PQL	mg/Kg	J (all detects)
SL-049-SA5B-SB-9.0-10	Nitrate-NO3	J	1.4	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5B-SB-2.0-3.0	TIN	J	2.68	9.97	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.39	4.98	PQL	mg/Kg	
SL-024-SA5B-SB-4.0-5.0	TIN	J	2.75	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.83	5.52	PQL	mg/Kg	
SL-024-SA5B-SB-9.0-10	TIN	J	2.49	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.97	5.35	PQL	mg/Kg	
SL-025-SA5B-SB-4.0-5.0	TIN	J	2.47	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.94	5.35	PQL	mg/Kg	
SL-025-SA5B-SB-9.0-10.0	TIN	J	2.39	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.72	5.39	PQL	mg/Kg	
SL-031-SA5B-SB-4.0-5.0	BORON	J	1.37	5.66	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	11.3	PQL	mg/Kg	
	Zirconium	J	3.79	5.66	PQL	mg/Kg	
SL-031-SA5B-SB-9.0-10.0	BORON	J	1.02	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	2.85	10.7	PQL	mg/Kg	
	Zirconium	J	3.60	5.33	PQL	mg/Kg	
SL-048-SA5B-SB-4.0-5.0	TIN	J	2.37	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.85	5.57	PQL	mg/Kg	
SL-048-SA5B-SB-9.0-10	TIN	J	2.48	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.81	5.19	PQL	mg/Kg	
SL-049-SA5B-SB-4.0-5.0	BORON	J	2.21	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	80.5	109	PQL	mg/Kg	
	TIN	J	2.52	10.9	PQL	mg/Kg	
	Zirconium	J	3.31	5.45	PQL	mg/Kg	
SL-049-SA5B-SB-9.0-10	SODIUM	J	77.4	99.5	PQL	mg/Kg	J (all detects)
	TIN	J	1.24	9.95	PQL	mg/Kg	
	Zirconium	J	2.62	4.98	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE064 | Laboratory: LL

EDD Filename: DE064_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-287-SA5B-SB-4.0-5.0	BORON	J	1.47	5.38	PQL	mg/Kg	J (all detects)
	TIN	J	2.80	10.8	PQL	mg/Kg	
	Zirconium	J	2.71	5.38	PQL	mg/Kg	
SL-287-SA5B-SB-9.0-10.0	TIN	J	2.41	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.32	5.17	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5B-SB-2.0-3.0	ANTIMONY	J	0.0787	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0683	0.403	PQL	mg/Kg	
SL-024-SA5B-SB-4.0-5.0	ANTIMONY	J	0.155	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0569	0.451	PQL	mg/Kg	
	SILVER	J	0.0398	0.113	PQL	mg/Kg	
SL-024-SA5B-SB-9.0-10	ANTIMONY	J	0.0817	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0915	0.432	PQL	mg/Kg	
	SILVER	J	0.0241	0.108	PQL	mg/Kg	
SL-025-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0993	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.105	0.420	PQL	mg/Kg	
	SILVER	J	0.0302	0.105	PQL	mg/Kg	
SL-025-SA5B-SB-9.0-10.0	ANTIMONY	J	0.113	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0956	0.427	PQL	mg/Kg	
	SILVER	J	0.0362	0.107	PQL	mg/Kg	
SL-031-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0743	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.113	0.444	PQL	mg/Kg	
	SILVER	J	0.0232	0.111	PQL	mg/Kg	
SL-031-SA5B-SB-9.0-10.0	ANTIMONY	J	0.0807	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.141	0.426	PQL	mg/Kg	
	SILVER	J	0.0256	0.107	PQL	mg/Kg	
SL-048-SA5B-SB-4.0-5.0	ANTIMONY	J	0.104	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0796	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0887	0.445	PQL	mg/Kg	
	SILVER	J	0.0137	0.111	PQL	mg/Kg	
SL-048-SA5B-SB-9.0-10	ANTIMONY	J	0.0734	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.131	0.419	PQL	mg/Kg	
	SILVER	J	0.0289	0.105	PQL	mg/Kg	
SL-049-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0713	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0584	0.427	PQL	mg/Kg	
	SILVER	J	0.0235	0.107	PQL	mg/Kg	
SL-049-SA5B-SB-9.0-10	CADMIUM	J	0.0667	0.101	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.101	0.406	PQL	mg/Kg	
	THALLIUM	J	0.0449	0.101	PQL	mg/Kg	
SL-287-SA5B-SB-4.0-5.0	ANTIMONY	J	0.181	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0590	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0878	0.443	PQL	mg/Kg	
	SILVER	J	0.0224	0.111	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE064 Laboratory: LL

EDD Filename: DE064_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-287-SA5B-SB-9.0-10.0	ANTIMONY	J	0.0659	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0590	0.405	PQL	mg/Kg	
	SILVER	J	0.0164	0.101	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)
SL-024-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-025-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-025-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)
SL-031-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-031-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-048-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-287-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.24	1.0	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5B-SB-4.0-5.0	MERCURY	J	0.0037	0.107	PQL	mg/Kg	J (all detects)
SL-024-SA5B-SB-9.0-10	MERCURY	J	0.0370	0.109	PQL	mg/Kg	J (all detects)
SL-025-SA5B-SB-4.0-5.0	MERCURY	J	0.0053	0.102	PQL	mg/Kg	J (all detects)
SL-025-SA5B-SB-9.0-10.0	MERCURY	J	0.0053	0.105	PQL	mg/Kg	J (all detects)
SL-048-SA5B-SB-9.0-10	MERCURY	J	0.0124	0.102	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5B-SB-2.0-3.0	AROCLOR 1254	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.8	3.4	PQL	ug/Kg	
SL-031-SA5B-SB-4.0-5.0	AROCLOR 1254	J	1.2	2.0	PQL	ug/Kg	J (all detects)
SL-049-SA5B-SB-9.0-10	Aroclor 5460	J	1.9	3.4	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE064 **Laboratory: LL**

EDD Filename: DE064_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.93	4.1	PQL	ug/Kg	J (all detects)
SL-024-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.64	4.1	PQL	ug/Kg	J (all detects)
SL-025-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.68 0.08	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-031-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.61	3.9	PQL	ug/Kg	J (all detects)
SL-048-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.70	4.2	PQL	ug/Kg	J (all detects)
SL-049-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.96	4.2	PQL	ug/Kg	J (all detects)
SL-049-SA5B-SB-9.0-10	METHYLENE CHLORIDE	J	1.2	4.0	PQL	ug/Kg	J (all detects)
SL-287-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.56	4.3	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-287-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	350	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5B-SB-9.0-10.0	BENZO(B)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE	J J	1.0 9.3	1.9 20	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-031-SA5B-SB-4.0-5.0	PYRENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-048-SA5B-SB-4.0-5.0	CHRYSENE	J	0.43	1.9	PQL	ug/Kg	J (all detects)
SL-048-SA5B-SB-9.0-10	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
SL-049-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE	J J J	0.87 8.6 0.52	1.8 20 1.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-287-SA5B-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	1.5	1.7	PQL	ug/Kg	J (all detects)

LDC #: 25750O4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/14
SDG #: DE064 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: AC
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti, Zn > 4x) (8-13)
VII.	Duplicate Sample Analysis	N	D (Sb, Ag < 5xRL) 9. Sample 1-7 batch control DE063.
VIII.	Laboratory Control Samples (LCS)	A	LCS
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	—	
XV	Field Blanks	—	

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-025-SA5B-SB-4.0-5.0	11	SL-049-SA5B-SB-9.0-10.0	21		31	
2	SL-025-SA5B-SB-9.0-10.0	12	SL-031-SA5B-SB-4.0-5.0	22		32	
3	SL-048-SA5B-SB-4.0-5.0	13	SL-031-SA5B-SB-9.0-10.0	23		33	
4	SL-048-SA5B-SB-9.0-10.0	14	(MS) MS	24		34	
5	SL-024-SA5B-SB-4.0-5.0	15	MSD	25		35	
6	SL-024-SA5B-SB-9.0-10.0	16	DUP	26		36	
7	SL-022-SA5B-SB-2.0-3.0	17		27		37	
8	SL-287-SA5B-SB-4.0-5.0	18		28		38	
9	SL-287-SA5B-SB-9.0-10.0	19		29		39	
10	SL-049-SA5B-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 25750O 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-7

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										
Sb			0.38	0.38	0.099	0.11	0.10	0.073	0.16	0.082	0.079										
Zr			8.3	4.15	3.9	3.7	1.8	2.8	2.8	3.0	2.4										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 8-13

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	8	9	10	11	12	13											
Sb			0.33	0.33	0.18	0.066	0.071		0.074	0.081											
Zr			7.1	3.55	2.7	2.3	3.3	2.6													

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.

SAMPLE DELIVERY GROUP

DE065

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-Jan-2011	TB-012011	6189232	TB	5030B	8015M	III
20-Jan-2011	TB-012011	6189232	TB	5030B	8260B	III
20-Jan-2011	TB-012011	6189232	TB	5030B	8260B SIM	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3050B	6010B	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3050B	6020	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3060A	7199	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3546	1625C	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3550B	8015B	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3550B	8015M	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3550B	8082	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3550B	8270C	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	3550B	8270C SIM	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	5035	8015M	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	5035	8260B	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	5035	8260B SIM	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	8330	8330A	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	Gen Prep	9045M	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	300.0	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	314.0	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	7471A	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	8015B	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	8015M	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	8315A	III
20-Jan-2011	SL-014-SA5B-SB-4.0-5.0	6189212	N	METHOD	9012B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3050B	6010B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	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
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3060A	7199	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3546	1625C	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3550B	8015B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3550B	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3550B	8082	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3550B	8270C	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	3550B	8270C SIM	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	5035	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	5035	8260B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	5035	8260B SIM	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	8330	8330A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	Gen Prep	9045M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	300.0	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	314.0	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	7471A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	8015B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	8315A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0	6189213	N	METHOD	9012B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3050B	6010B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3050B	6020	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3060A	7199	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3546	1625C	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3550B	8015B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3550B	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	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
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3550B	8270C	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	3550B	8270C SIM	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	5035	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	5035	8260B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	5035	8260B SIM	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	8330	8330A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	300.0	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	314.0	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	7471A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	8015B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	8315A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MS	6189214	MS	METHOD	9012B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3050B	6010B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3050B	6020	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3546	1625C	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3550B	8015B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3550B	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3550B	8082	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3550B	8270C	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	3550B	8270C SIM	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	5035	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	5035	8260B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	5035	8260B SIM	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	8330	8330A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	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
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	METHOD	8015B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	METHOD	8015M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0MSD	6189215	MSD	METHOD	8315A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	3050B	6010B	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	3050B	6020	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	3060A	7199	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	Gen Prep	9045M	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	METHOD	300.0	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	METHOD	314.0	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	METHOD	7471A	III
20-Jan-2011	SL-294-SA5B-SB-4.0-5.0DUP	6189216	DUP	METHOD	9012B	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3050B	6010B	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3050B	6020	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3060A	7199	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3546	1625C	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3550B	8015B	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3550B	8015M	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3550B	8082	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3550B	8270C	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	3550B	8270C SIM	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	5035	8015M	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	5035	8260B	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	5035	8260B SIM	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	8330	8330A	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	Gen Prep	9045M	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	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
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	METHOD	314.0	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	METHOD	7471A	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	METHOD	8015B	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	METHOD	8015M	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	METHOD	8315A	III
20-Jan-2011	DUP19-SA5B-QC-012011	6189218	FD	METHOD	9012B	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3050B	6010B	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3050B	6020	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3060A	7199	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3546	1625C	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3550B	8015B	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3550B	8015M	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3550B	8082	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3550B	8270C	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	3550B	8270C SIM	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	5035	8015M	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	5035	8260B	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	5035	8260B SIM	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	8330	8330A	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	Gen Prep	9045M	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	METHOD	300.0	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	METHOD	314.0	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	METHOD	7471A	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	METHOD	8015B	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	METHOD	8015M	III
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	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
20-Jan-2011	SL-294-SA5B-SB-9.0-10.0	6189217	N	METHOD	9012B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3050B	6010B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3050B	6020	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3060A	7199	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3546	1625C	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3550B	8015B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3550B	8015M	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3550B	8082	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3550B	8270C	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	3550B	8270C SIM	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	5035	8015M	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	5035	8260B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	5035	8260B SIM	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	8330	8330A	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	Gen Prep	9045M	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	300.0	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	314.0	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	7471A	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	8015B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	8015M	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	8315A	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0	6189227	N	METHOD	9012B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0DUP	P189227D270155B	DUP	METHOD	314.0	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0DUP	P189227D270445B	DUP	METHOD	300.0	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0DUP	P189227D271931B	DUP	METHOD	9012B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0MSD	P189227M321034A	MSD	METHOD	8015M	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0MS	P189227R270218B	MS	METHOD	314.0	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0MS	P189227R270500B	MS	METHOD	300.0	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0MS	P189227R271932B	MS	METHOD	9012B	III
20-Jan-2011	SL-019-SA5B-SB-4.0-5.0MS	P189227R321017A	MS	METHOD	8015M	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	3005A	6010B	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	3020A	6020	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	3510C	8082	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	3510C	8270C	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	Gen Prep	300.0	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	Gen Prep	314.0	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	Gen Prep	7199	III
20-Jan-2011	EB23-SA5B-012011	6189219	EB	METHOD	7470A	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3050B	6010B	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3050B	6020	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3060A	7199	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3546	1625C	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3550B	8015B	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3550B	8015M	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3550B	8082	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3550B	8270C	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	3550B	8270C SIM	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	5035	8015M	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	5035	8260B	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	5035	8260B SIM	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	8330	8330A	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	Gen Prep	9045M	III

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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
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	300.0	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	314.0	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	6850	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	7471A	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	8015B	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	8015M	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	8315A	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0	6189220	N	METHOD	9012B	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0MSD	P189220M241418A	MSD	METHOD	6850	III
20-Jan-2011	SL-030-SA5B-SB-4.0-5.0MS	P189220R241411A	MS	METHOD	6850	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3050B	6010B	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3050B	6020	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3060A	7199	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3546	1625C	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3550B	8015B	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3550B	8015M	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3550B	8082	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3550B	8270C	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	3550B	8270C SIM	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	5035	8015M	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	5035	8260B	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	5035	8260B SIM	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	8330	8330A	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	Gen Prep	9045M	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	300.0	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	314.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	7471A	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	8015B	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	8015M	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	8315A	III
20-Jan-2011	SL-030-SA5B-SB-9.0-10.0	6189221	N	METHOD	9012B	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	3005A	6010B	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	3020A	6020	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	3510C	8082	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	3510C	8270C	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	Gen Prep	300.0	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	Gen Prep	314.0	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	Gen Prep	7199	III
20-Jan-2011	EB24-SA5B-012011	6189222	EB	METHOD	7470A	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3050B	6010B	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3050B	6020	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3060A	7199	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3546	1625C	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3550B	8015B	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3550B	8015M	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3550B	8082	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3550B	8270C	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	3550B	8270C SIM	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	5035	8015M	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	5035	8260B	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	5035	8260B SIM	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	8330	8330A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	Gen Prep	9045M	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	300.0	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	314.0	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	7471A	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	8015B	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	8015M	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	8315A	III
20-Jan-2011	SL-035-SA5B-SB-7.0-8.0	6189224	N	METHOD	9012B	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3050B	6010B	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3050B	6020	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3060A	7199	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3546	1625C	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3550B	8015B	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3550B	8015M	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3550B	8082	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3550B	8270C	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	3550B	8270C SIM	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	5035	8015M	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	5035	8260B	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	5035	8260B SIM	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	8330	8330A	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	Gen Prep	9045M	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	300.0	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	314.0	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	7471A	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	8015B	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	8015M	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	8315A	III
20-Jan-2011	SL-035-SA5B-SB-4.0-5.0	6189223	N	METHOD	9012B	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3050B	6010B	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3050B	6020	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3060A	7199	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3546	1625C	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3550B	8015B	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3550B	8015M	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3550B	8082	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3550B	8270C	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	3550B	8270C SIM	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	5035	8015M	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	5035	8260B	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	5035	8260B SIM	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	8330	8330A	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	Gen Prep	9045M	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	300.0	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	314.0	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	7471A	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	8015B	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	8015M	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	8315A	III
20-Jan-2011	SL-029-SA5B-SB-4.0-5.0	6189230	N	METHOD	9012B	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3050B	6010B	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3060A	7199	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3546	1625C	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3550B	8015B	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3550B	8015M	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3550B	8082	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3550B	8270C	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	3550B	8270C SIM	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	5035	8015M	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	5035	8260B	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	5035	8260B SIM	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	8330	8330A	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	Gen Prep	9045M	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	300.0	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	314.0	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	7471A	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	8015B	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	8015M	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	8315A	III
20-Jan-2011	SL-029-SA5B-SB-9.0-10.0	6189231	N	METHOD	9012B	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	3050B	6010B	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	3050B	6020	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	3060A	7199	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	3550B	8082	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	3550B	8270C	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	3550B	8270C SIM	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	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
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	5035	8260B SIM	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	Gen Prep	9045M	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	METHOD	300.0	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	METHOD	314.0	III
20-Jan-2011	SL-036-SA5B-SB-4.0-5.0	6189228	N	METHOD	7471A	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3050B	6010B	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3050B	6020	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3060A	7199	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3546	1625C	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3550B	8015B	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3550B	8015M	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3550B	8082	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3550B	8270C	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	3550B	8270C SIM	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	5035	8015M	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	5035	8260B	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	5035	8260B SIM	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	8330	8330A	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	Gen Prep	9045M	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	METHOD	300.0	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	METHOD	314.0	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	METHOD	7471A	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	METHOD	8015B	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	METHOD	8015M	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	N	METHOD	8315A	III
20-Jan-2011	SL-034-SA5B-SB-4.0-5.0	6189225	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
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3050B	6010B	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3050B	6020	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3060A	7199	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3546	1625C	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3550B	8015B	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3550B	8015M	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3550B	8082	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3550B	8270C	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	3550B	8270C SIM	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	5035	8015M	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	5035	8260B	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	5035	8260B SIM	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	8330	8330A	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	Gen Prep	9045M	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	300.0	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	314.0	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	7471A	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	8015B	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	8015M	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	8315A	III
20-Jan-2011	SL-034-SA5B-SB-9.0-10	6189226	N	METHOD	9012B	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3050B	6010B	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3050B	6020	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3060A	7199	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3546	1625C	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	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
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3550B	8015M	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3550B	8082	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3550B	8270C	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	3550B	8270C SIM	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	5035	8015M	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	5035	8260B	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	5035	8260B SIM	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	8330	8330A	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	Gen Prep	9045M	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	METHOD	300.0	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	METHOD	314.0	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	METHOD	7471A	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	METHOD	8015B	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	METHOD	8015M	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	N	METHOD	8315A	III
20-Jan-2011	SL-037-SA5B-SB-3.5-4.5	6189229	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: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 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
Nitrate-NO3	2.8		0.94	MDL	1.8	PQL	mg/Kg	J	FD

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
FLUORIDE	1.9		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.4		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	7.3		0.90	MDL	1.7	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.24	J	1.03	MDL	5.81	PQL	mg/Kg	J	Z
POTASSIUM	2910		20.9	MDL	58.1	PQL	mg/Kg	J	Q
TIN	2.94	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	4.56	J	0.976	MDL	5.81	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.94	J	0.988	MDL	5.55	PQL	mg/Kg	J	Z
POTASSIUM	2910		20.0	MDL	55.5	PQL	mg/Kg	J	Q
TIN	2.64	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.39	J	0.933	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2680		19.7	MDL	54.8	PQL	mg/Kg	J	Q
TIN	2.54	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2930		20.4	MDL	56.7	PQL	mg/Kg	J	Q
TIN	3.06	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	1.98	J	0.953	MDL	5.67	PQL	mg/Kg	U	B

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.04	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z
POTASSIUM	2880		19.7	MDL	54.7	PQL	mg/Kg	J	Q
TIN	2.69	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-029-SA5B-SB-9.0-10.0 ***Collected:*** 1/20/2011 2:27:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.48	J	0.919	MDL	5.47	PQL	mg/Kg	U	B

Sample ID: SL-030-SA5B-SB-4.0-5.0 ***Collected:*** 1/20/2011 11:22:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.60	J	1.01	MDL	5.69	PQL	mg/Kg	J	Z
POTASSIUM	3640		20.5	MDL	56.9	PQL	mg/Kg	J	Q
TIN	2.69	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	5.14	J	0.956	MDL	5.69	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5B-SB-9.0-10.0 ***Collected:*** 1/20/2011 11:30:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4220		20.6	MDL	57.3	PQL	mg/Kg	J	Q
TIN	2.69	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	4.05	J	0.962	MDL	5.73	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SB-4.0-5.0 ***Collected:*** 1/20/2011 3:45:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.96	J	0.992	MDL	5.57	PQL	mg/Kg	J	Z
POTASSIUM	3250		20.1	MDL	55.7	PQL	mg/Kg	J	Q
TIN	2.51	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.32	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SB-9.0-10 ***Collected:*** 1/20/2011 3:53:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.90	J	0.973	MDL	5.46	PQL	mg/Kg	J	Z
POTASSIUM	3270		19.7	MDL	54.6	PQL	mg/Kg	J	Q
TIN	2.66	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.63	J	0.918	MDL	5.46	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.51	J	0.960	MDL	5.39	PQL	mg/Kg	J	Z
POTASSIUM	2960		19.4	MDL	53.9	PQL	mg/Kg	J	Q
TIN	2.53	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.36	J	0.906	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.22	J	0.934	MDL	5.25	PQL	mg/Kg	J	Z
POTASSIUM	2900		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	2.51	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.85	J	0.882	MDL	5.25	PQL	mg/Kg	U	B

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.89	J	0.965	MDL	5.42	PQL	mg/Kg	J	Z
POTASSIUM	3450		19.5	MDL	54.2	PQL	mg/Kg	J	Q
TIN	2.80	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.911	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.28	J	0.969	MDL	5.44	PQL	mg/Kg	J	Z
POTASSIUM	2670		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.51	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.50	J	0.914	MDL	5.44	PQL	mg/Kg	U	B

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4140		20.0	MDL	55.6	PQL	mg/Kg	J	Q
TIN	2.62	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.58	J	0.933	MDL	5.56	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.46	J	0.951	MDL	5.34	PQL	mg/Kg	J	Z
POTASSIUM	2720		19.2	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.59	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.897	MDL	5.34	PQL	mg/Kg	U	B

Method Category: METALS **Method:** 6020 **Matrix:** AQ

Sample ID: EB23-SA5B-012011 *Collected:* 1/20/2011 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
LEAD	0.000054	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Sample ID: EB24-SA5B-012011 *Collected:* 1/20/2011 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
LEAD	0.000072	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

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

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.189	J	0.0697	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	5.75		0.0930	MDL	0.465	PQL	mg/Kg	J	Q, E
COBALT	6.03		0.0232	MDL	0.116	PQL	mg/Kg	J	A
NICKEL	14.2		0.116	MDL	0.465	PQL	mg/Kg	J	A
SILVER	0.0408	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	44.3		0.0256	MDL	0.116	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.2		0.0767	MDL	0.465	PQL	mg/Kg	J	A
LEAD	6.77		0.0121	MDL	0.232	PQL	mg/Kg	J	Q

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0867	J	0.0465	MDL	0.465	PQL	mg/Kg	J	Z

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.52		0.0581	MDL	0.116	PQL	mg/Kg	J	FD

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	111		0.126	MDL	0.465	PQL	mg/Kg	J	E

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0653	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	4.36		0.0871	MDL	0.436	PQL	mg/Kg	J	Q, E
CADMIUM	0.106	J	0.0436	MDL	0.109	PQL	mg/Kg	J	Z
COBALT	4.73		0.0218	MDL	0.109	PQL	mg/Kg	J	A
NICKEL	8.72		0.109	MDL	0.436	PQL	mg/Kg	J	A
SILVER	0.0300	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	28.5		0.0240	MDL	0.109	PQL	mg/Kg	J	A

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.65		0.0719	MDL	0.436	PQL	mg/Kg	J	A
LEAD	5.14		0.0113	MDL	0.218	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	72.9		0.118	MDL	0.436	PQL	mg/Kg	J	E

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0638	U	0.0638	MDL	0.213	PQL	mg/Kg	UJ	Q
ARSENIC	3.31		0.0851	MDL	0.425	PQL	mg/Kg	J	Q, E
CADMIUM	0.0825	J	0.0425	MDL	0.106	PQL	mg/Kg	J	Z
COBALT	2.71		0.0213	MDL	0.106	PQL	mg/Kg	J	A
NICKEL	3.97		0.106	MDL	0.425	PQL	mg/Kg	J	A
SILVER	0.0259	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	16.5		0.0234	MDL	0.106	PQL	mg/Kg	J	A

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	2.85		0.0702	MDL	0.425	PQL	mg/Kg	J	A
LEAD	3.56		0.0111	MDL	0.213	PQL	mg/Kg	J	Q

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	59.7		0.115	MDL	0.425	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0814	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	4.39		0.0907	MDL	0.454	PQL	mg/Kg	J	Q, E
COBALT	4.75		0.0227	MDL	0.113	PQL	mg/Kg	J	A
NICKEL	8.76		0.113	MDL	0.454	PQL	mg/Kg	J	A
SILVER	0.0368	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	28.1		0.0250	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.66		0.0749	MDL	0.454	PQL	mg/Kg	J	A
LEAD	5.39		0.0118	MDL	0.227	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0706	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	85.1		0.122	MDL	0.454	PQL	mg/Kg	J	E

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.158	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	5.16		0.0884	MDL	0.442	PQL	mg/Kg	J	Q, E
COBALT	5.97		0.0221	MDL	0.111	PQL	mg/Kg	J	A
NICKEL	11.6		0.111	MDL	0.442	PQL	mg/Kg	J	A
SILVER	0.0354	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	39.0		0.0243	MDL	0.111	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	10.5		0.0729	MDL	0.442	PQL	mg/Kg	J	A
LEAD	6.61		0.0115	MDL	0.221	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0952	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.1		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.214	J	0.0690	MDL	0.230	PQL	mg/Kg	J	Z, Q
ARSENIC	6.51		0.0919	MDL	0.460	PQL	mg/Kg	J	Q, E
COBALT	7.64		0.0230	MDL	0.115	PQL	mg/Kg	J	A
NICKEL	15.8		0.115	MDL	0.460	PQL	mg/Kg	J	A
SILVER	0.0446	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	54.1		0.0253	MDL	0.115	PQL	mg/Kg	J	A

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	14.3		0.0759	MDL	0.460	PQL	mg/Kg	J	A
LEAD	8.64		0.0120	MDL	0.230	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.185	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	121		0.124	MDL	0.460	PQL	mg/Kg	J	E

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 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	0.181	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	5.67		0.0890	MDL	0.445	PQL	mg/Kg	J	Q, E
COBALT	8.30		0.0222	MDL	0.111	PQL	mg/Kg	J	A
NICKEL	15.0		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0347	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	50.3		0.0245	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 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
COPPER	14.3		0.0734	MDL	0.445	PQL	mg/Kg	J	A
LEAD	9.29		0.0116	MDL	0.222	PQL	mg/Kg	J	Q

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 11:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 11:30:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	117		0.120	MDL	0.445	PQL	mg/Kg	J	E

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0675	MDL	0.225	PQL	mg/Kg	J	Z, Q
ARSENIC	3.96		0.0900	MDL	0.450	PQL	mg/Kg	J	Q, E
COBALT	4.88		0.0225	MDL	0.113	PQL	mg/Kg	J	A
NICKEL	9.13		0.113	MDL	0.450	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0341	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	28.8		0.0248	MDL	0.113	PQL	mg/Kg	J	A

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.84		0.0743	MDL	0.450	PQL	mg/Kg	J	A
LEAD	5.42		0.0117	MDL	0.225	PQL	mg/Kg	J	Q

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0825	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	84.8		0.122	MDL	0.450	PQL	mg/Kg	J	E

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.106	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	4.25		0.0866	MDL	0.433	PQL	mg/Kg	J	Q, E
COBALT	5.25		0.0216	MDL	0.108	PQL	mg/Kg	J	A
NICKEL	9.43		0.108	MDL	0.433	PQL	mg/Kg	J	A
SILVER	0.0277	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	33.4		0.0238	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.06		0.0714	MDL	0.433	PQL	mg/Kg	J	A
LEAD	7.06		0.0113	MDL	0.216	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0967	J	0.0433	MDL	0.433	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	96.5		0.117	MDL	0.433	PQL	mg/Kg	J	E

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0937	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	4.26		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
COBALT	4.66		0.0220	MDL	0.110	PQL	mg/Kg	J	A
NICKEL	7.78		0.110	MDL	0.440	PQL	mg/Kg	J	A
SILVER	0.0213	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	28.3		0.0242	MDL	0.110	PQL	mg/Kg	J	A

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.96		0.0726	MDL	0.440	PQL	mg/Kg	J	A
LEAD	5.86		0.0114	MDL	0.220	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	75.1		0.119	MDL	0.440	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0893	J	0.0624	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	3.66		0.0832	MDL	0.416	PQL	mg/Kg	J	Q, E
COBALT	3.80		0.0208	MDL	0.104	PQL	mg/Kg	J	A
NICKEL	6.49		0.104	MDL	0.416	PQL	mg/Kg	J	A
SILVER	0.0224	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	22.8		0.0229	MDL	0.104	PQL	mg/Kg	J	A

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	5.87		0.0686	MDL	0.416	PQL	mg/Kg	J	A
LEAD	4.84		0.0108	MDL	0.208	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *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	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	66.7		0.112	MDL	0.416	PQL	mg/Kg	J	E

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.110	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	4.33		0.0885	MDL	0.442	PQL	mg/Kg	J	Q, E
COBALT	5.17		0.0221	MDL	0.111	PQL	mg/Kg	J	A
NICKEL	8.50		0.111	MDL	0.442	PQL	mg/Kg	J	A
SILVER	0.0396	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	30.0		0.0243	MDL	0.111	PQL	mg/Kg	J	A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-036-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 3:04:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.41		0.0730	MDL	0.442	PQL	mg/Kg	J	A
LEAD	5.69		0.0115	MDL	0.221	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 3:04:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0879	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 3:04:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	86.7		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: SL-037-SA5B-SB-3.5-4.5 **Collected:** 1/20/2011 3:58:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0910	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	3.68		0.0862	MDL	0.431	PQL	mg/Kg	J	Q, E
COBALT	4.34		0.0216	MDL	0.108	PQL	mg/Kg	J	A
NICKEL	7.62		0.108	MDL	0.431	PQL	mg/Kg	J	A
SILVER	0.0273	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	26.3		0.0237	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-037-SA5B-SB-3.5-4.5 **Collected:** 1/20/2011 3:58:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	7.38		0.0711	MDL	0.431	PQL	mg/Kg	J	A
LEAD	4.50		0.0112	MDL	0.216	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA5B-SB-3.5-4.5 **Collected:** 1/20/2011 3:58:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0783	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-037-SA5B-SB-3.5-4.5 **Collected:** 1/20/2011 3:58:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	77.1		0.116	MDL	0.431	PQL	mg/Kg	J	E

Sample ID: SL-294-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 9:48:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.265		0.0660	MDL	0.220	PQL	mg/Kg	J	Q
ARSENIC	5.17		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
COBALT	6.85		0.0220	MDL	0.110	PQL	mg/Kg	J	A
NICKEL	13.9		0.110	MDL	0.440	PQL	mg/Kg	J	A
SILVER	0.0348	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	45.0		0.0242	MDL	0.110	PQL	mg/Kg	J	A

Sample ID: SL-294-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 9:48:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	12.0		0.0726	MDL	0.440	PQL	mg/Kg	J	A
LEAD	7.88		0.0114	MDL	0.220	PQL	mg/Kg	J	Q

Sample ID: SL-294-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 9:48:00 **Analysis Type:** REA6 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-294-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 9:48:00 **Analysis Type:** REA7 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.630		0.0550	MDL	0.110	PQL	mg/Kg	J	FD

Sample ID: SL-294-SA5B-SB-4.0-5.0 **Collected:** 1/20/2011 9:48:00 **Analysis Type:** REA8 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.4		0.119	MDL	0.440	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0920	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	4.39		0.0863	MDL	0.431	PQL	mg/Kg	J	Q, E
COBALT	4.91		0.0216	MDL	0.108	PQL	mg/Kg	J	A
NICKEL	8.68		0.108	MDL	0.431	PQL	mg/Kg	J	A
SILVER	0.0524	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	30.4		0.0237	MDL	0.108	PQL	mg/Kg	J	A

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	8.61		0.0712	MDL	0.431	PQL	mg/Kg	J	A
LEAD	5.52		0.0112	MDL	0.216	PQL	mg/Kg	J	Q

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.9		0.117	MDL	0.431	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** AQ

Sample ID: EB23-SA5B-012011 *Collected:* 1/20/2011 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
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Sample ID: EB24-SA5B-012011 *Collected:* 1/20/2011 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	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 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
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
HEXAVALENT CHROMIUM	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
HEXAVALENT CHROMIUM	0.29	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 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
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 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
MERCURY	0.0033	U	0.0033	MDL	0.114	PQL	mg/Kg	UJ	E

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
MERCURY	0.0032	U	0.0032	MDL	0.112	PQL	mg/Kg	UJ	E

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
MERCURY	0.0032	U	0.0032	MDL	0.110	PQL	mg/Kg	UJ	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.107	PQL	mg/Kg	UJ	E

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
MERCURY	0.0031	U	0.0031	MDL	0.110	PQL	mg/Kg	UJ	E

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 11:30:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.883		0.0156	MDL	0.543	PQL	mg/Kg	J	E

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 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
MERCURY	0.0032	U	0.0032	MDL	0.112	PQL	mg/Kg	UJ	E

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.106	PQL	mg/Kg	UJ	E

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.109	PQL	mg/Kg	UJ	E

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0029	U	0.0029	MDL	0.102	PQL	mg/Kg	UJ	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0102	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z, E

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.107	PQL	mg/Kg	UJ	E

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0032	U	0.0032	MDL	0.110	PQL	mg/Kg	UJ	E

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.107	PQL	mg/Kg	UJ	E

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.3	U	2.3	MDL	7.0	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	39		2.3	MDL	7.0	PQL	mg/Kg	J	FD

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *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)	1.8	J	0.92	MDL	2.7	PQL	mg/Kg	J	Z

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *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)	2.0	J	0.88	MDL	2.6	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *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)	1.2	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z, Q, Q, FD
EFH (C21-C30)	22		0.45	MDL	1.3	PQL	mg/Kg	J	FD
EFH (C8-C11)	0.45	U	0.45	MDL	1.3	PQL	mg/Kg	R	Q

Method Category: SVOA **Method:** 8082 **Matrix:** AQ

Sample ID: EB23-SA5B-012011 *Collected:* 1/20/2011 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
Aroclor 5432	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L
Aroclor 5442	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L
Aroclor 5460	0.10	U	0.10	MDL	0.52	PQL	ug/L	UJ	L

Sample ID: EB24-SA5B-012011 *Collected:* 1/20/2011 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
Aroclor 5432	0.11	U	0.11	MDL	0.55	PQL	ug/L	UJ	L
Aroclor 5442	0.11	U	0.11	MDL	0.55	PQL	ug/L	UJ	L
Aroclor 5460	0.11	U	0.11	MDL	0.55	PQL	ug/L	UJ	L

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.66	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *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 1254	0.43	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *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 1254	1.3	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *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 1248	0.81	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1254	1.5	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *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 1254	0.66	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 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
AROCLOR 1254	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.78	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *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 1248	0.57	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1254	1.2	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.6	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *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 1254	1.7	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *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 1254	0.59	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *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 1254	0.72	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *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 1254	0.65	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	55	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	58	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

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

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	7.0	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.71	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD
NAPHTHALENE	0.94	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z, FD
PYRENE	0.78	U	0.78	MDL	2.0	PQL	ug/Kg	UJ	FD

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *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	0.45	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.9	J	6.8	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.8	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.82	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *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	0.93	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *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	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.84	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 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
2-METHYLNAPHTHALENE	0.79	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.6	J	6.9	MDL	21	PQL	ug/Kg	J	Z
FLUORENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *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(G,H,I)PERYLENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.96	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.5	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.82	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.90	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.5	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.93	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	15	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	0.85	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.76	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.65	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.85	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	16	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.76	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *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	0.39	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.8	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	J	6.7	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	0.80	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.83	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *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, FD
BENZO(A)PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD
BENZO(G,H,I)PERYLENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, FD
CHRYSENE	2.1		0.37	MDL	1.9	PQL	ug/Kg	J	FD
FLUORANTHENE	2.2		0.75	MDL	1.9	PQL	ug/Kg	J	FD
NAPHTHALENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	FD
PYRENE	2.1		0.75	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *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	0.47	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.2	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.84	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.8	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.90	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	1300	J	660	MDL	1700	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	310	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 11:30:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	200	J	110	MDL	570	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: DUP19-SA5B-QC-012011 *Collected:* 1/20/2011 9:55:00 *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	0.56	J	0.24	MDL	4.0	PQL	ug/Kg	UJ	B, FD

Sample ID: SL-014-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:34:00 *Analysis Type:* RES *Dilution:* 1.05

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.29	MDL	4.7	PQL	ug/Kg	U	B

Sample ID: SL-019-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 10:30:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.93	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-029-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 2:18:00 *Analysis Type:* RES *Dilution:* 0.96

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	4.4	PQL	ug/Kg	U	B

Sample ID: SL-029-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 2:27:00 *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	3.3	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-030-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 11:22:00 *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	0.58	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-030-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 11:30:00 *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	0.61	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-034-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:45:00 *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	4.9		0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-034-SA5B-SB-9.0-10 *Collected:* 1/20/2011 3:53:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.13	J	0.1	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.83	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-035-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 1:53:00 *Analysis Type:* RES *Dilution:* 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.73	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-035-SA5B-SB-7.0-8.0 *Collected:* 1/20/2011 1:39:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.67	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-036-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 3:04:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory:** LL

EDD Filename: DE065_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-037-SA5B-SB-3.5-4.5 *Collected:* 1/20/2011 3:58:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-294-SA5B-SB-4.0-5.0 *Collected:* 1/20/2011 9:48:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.2	J	0.22	MDL	3.7	PQL	ug/Kg	UJ	B, FD

Sample ID: SL-294-SA5B-SB-9.0-10.0 *Collected:* 1/20/2011 10:04:00 *Analysis Type:* RES *Dilution:* 0.75

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.86	J	0.20	MDL	3.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE065

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB23-SA5B-012011 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects)
EB24-SA5B-012011 (RES)		25.00	24.00	HOURS	UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02508BB222121	1/28/2011 9:21:00 PM	PHOSPHORUS TIN	0.951 mg/Kg 1.32 mg/Kg	DUP19-SA5B-QC-012011 SL-014-SA5B-SB-4.0-5.0 SL-019-SA5B-SB-4.0-5.0 SL-029-SA5B-SB-4.0-5.0 SL-029-SA5B-SB-9.0-10.0 SL-030-SA5B-SB-4.0-5.0 SL-030-SA5B-SB-9.0-10.0 SL-034-SA5B-SB-4.0-5.0 SL-034-SA5B-SB-9.0-10 SL-035-SA5B-SB-4.0-5.0 SL-035-SA5B-SB-7.0-8.0 SL-036-SA5B-SB-4.0-5.0 SL-037-SA5B-SB-3.5-4.5 SL-294-SA5B-SB-4.0-5.0 SL-294-SA5B-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
DUP19-SA5B-QC-012011(REA)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-014-SA5B-SB-4.0-5.0(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-019-SA5B-SB-4.0-5.0(REA)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-029-SA5B-SB-4.0-5.0(REA)	TIN	3.06 mg/Kg	3.06U mg/Kg
SL-029-SA5B-SB-9.0-10.0(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-030-SA5B-SB-4.0-5.0(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-030-SA5B-SB-9.0-10.0(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-034-SA5B-SB-4.0-5.0(REA)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-034-SA5B-SB-9.0-10(REA)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-035-SA5B-SB-4.0-5.0(REA)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-035-SA5B-SB-7.0-8.0(REA)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-036-SA5B-SB-4.0-5.0(REA)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-037-SA5B-SB-3.5-4.5(REA)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-294-SA5B-SB-4.0-5.0(REA)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-294-SA5B-SB-9.0-10.0(REA)	TIN	2.59 mg/Kg	2.59U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB56B211215A	1/25/2011 12:15:00 PM	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	5.1 ug/Kg 2.0 ug/Kg 0.29 ug/Kg	DUP19-SA5B-QC-012011 SL-014-SA5B-SB-4.0-5.0 SL-019-SA5B-SB-4.0-5.0 SL-029-SA5B-SB-4.0-5.0 SL-029-SA5B-SB-9.0-10.0 SL-030-SA5B-SB-4.0-5.0 SL-030-SA5B-SB-9.0-10.0 SL-034-SA5B-SB-4.0-5.0 SL-034-SA5B-SB-9.0-10 SL-035-SA5B-SB-4.0-5.0 SL-035-SA5B-SB-7.0-8.0 SL-036-SA5B-SB-4.0-5.0 SL-037-SA5B-SB-3.5-4.5 SL-294-SA5B-SB-4.0-5.0 SL-294-SA5B-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
DUP19-SA5B-QC-012011(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.0U ug/Kg
SL-014-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.7U ug/Kg
SL-019-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.93 ug/Kg	4.1U ug/Kg
SL-029-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.7 ug/Kg	4.4U ug/Kg
SL-029-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	3.3 ug/Kg	3.9U ug/Kg
SL-030-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.58 ug/Kg	4.1U ug/Kg
SL-030-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.61 ug/Kg	4.0U ug/Kg
SL-034-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.9 ug/Kg	4.9U ug/Kg
SL-034-SA5B-SB-9.0-10(RES)	METHYLENE CHLORIDE	0.83 ug/Kg	4.0U ug/Kg
SL-034-SA5B-SB-9.0-10(RES)	TOLUENE	0.10 ug/Kg	4.0U ug/Kg
SL-035-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.73 ug/Kg	4.5U ug/Kg
SL-035-SA5B-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.1U ug/Kg
SL-036-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.1U ug/Kg
SL-037-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-294-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	3.7U ug/Kg
SL-294-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.86 ug/Kg	3.3U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE065 | Laboratory: LL

EDD Filename: DE065_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-294-SA5B-SB-4.0-5.0MS	ARSENIC	157	172	75.00-125.00	-	ARSENIC	
SL-294-SA5B-SB-4.0-5.0MSD	LEAD	129	-	75.00-125.00	-	LEAD	
(DUP19-SA5B-QC-012011	VANADIUM	129	129	75.00-125.00	-	VANADIUM	
SL-014-SA5B-SB-4.0-5.0							
SL-019-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-9.0-10.0							
SL-030-SA5B-SB-4.0-5.0							
SL-030-SA5B-SB-9.0-10.0							J (all detects)
SL-034-SA5B-SB-4.0-5.0							
SL-034-SA5B-SB-9.0-10							V No Qual, >4x
SL-035-SA5B-SB-4.0-5.0							
SL-035-SA5B-SB-7.0-8.0							
SL-036-SA5B-SB-4.0-5.0							
SL-037-SA5B-SB-3.5-4.5							
SL-294-SA5B-SB-4.0-5.0							
SL-294-SA5B-SB-9.0-10.0)							
SL-294-SA5B-SB-4.0-5.0MS	ANTIMONY	42	44	75.00-125.00	-	ANTIMONY	
SL-294-SA5B-SB-4.0-5.0MSD	ZINC	70	150	75.00-125.00	-	ZINC	
(DUP19-SA5B-QC-012011							
SL-014-SA5B-SB-4.0-5.0							
SL-019-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-9.0-10.0							
SL-030-SA5B-SB-4.0-5.0							
SL-030-SA5B-SB-9.0-10.0							J(all detects) UJ(all non-detects)
SL-034-SA5B-SB-4.0-5.0							
SL-034-SA5B-SB-9.0-10							Zn No Qual, >4x
SL-035-SA5B-SB-4.0-5.0							
SL-035-SA5B-SB-7.0-8.0							
SL-036-SA5B-SB-4.0-5.0							
SL-037-SA5B-SB-3.5-4.5							
SL-294-SA5B-SB-4.0-5.0							
SL-294-SA5B-SB-9.0-10.0)							
SL-294-SA5B-SB-4.0-5.0MS	BARIUM	163	129	75.00-125.00	-	BARIUM	
SL-294-SA5B-SB-4.0-5.0MSD							
(DUP19-SA5B-QC-012011							
SL-014-SA5B-SB-4.0-5.0							
SL-019-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-9.0-10.0							
SL-030-SA5B-SB-4.0-5.0							
SL-030-SA5B-SB-9.0-10.0							No Qual, >4x
SL-034-SA5B-SB-4.0-5.0							
SL-034-SA5B-SB-9.0-10							
SL-035-SA5B-SB-4.0-5.0							
SL-035-SA5B-SB-7.0-8.0							
SL-036-SA5B-SB-4.0-5.0							
SL-037-SA5B-SB-3.5-4.5							
SL-294-SA5B-SB-4.0-5.0							
SL-294-SA5B-SB-9.0-10.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE065 Laboratory: LL

EDD Filename: DE065_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-294-SA5B-SB-4.0-5.0MS	ALUMINUM	3458	3464	75.00-125.00	-	ALUMINUM	
SL-294-SA5B-SB-4.0-5.0MSD	CALCIUM	1226	1067	75.00-125.00	-	CALCIUM	
(DUP19-SA5B-QC-012011	IRON	2209	2614	75.00-125.00	-	IRON	
SL-014-SA5B-SB-4.0-5.0	MAGNESIUM	451	389	75.00-125.00	-	MAGNESIUM	
SL-019-SA5B-SB-4.0-5.0	MANGANESE	163	173	75.00-125.00	-	MANGANESE	
SL-029-SA5B-SB-4.0-5.0	POTASSIUM	-	139	75.00-125.00	-	POTASSIUM	
SL-029-SA5B-SB-9.0-10.0	TITANIUM	384	394	75.00-125.00	-	TITANIUM	
SL-030-SA5B-SB-4.0-5.0							
SL-030-SA5B-SB-9.0-10.0							J(all detects)
SL-034-SA5B-SB-4.0-5.0							
SL-034-SA5B-SB-9.0-10							Al, Ca, Fe,
SL-035-SA5B-SB-4.0-5.0							Mg, Mn, Ti
SL-035-SA5B-SB-7.0-8.0							No Qual, >4x
SL-036-SA5B-SB-4.0-5.0							
SL-037-SA5B-SB-3.5-4.5							
SL-294-SA5B-SB-4.0-5.0							
SL-294-SA5B-SB-9.0-10.0)							

Method: 7471A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-294-SA5B-SB-4.0-5.0MSD	MERCURY	-	-	65.00-135.00	24 (20.00)	MERCURY	
(DUP19-SA5B-QC-012011							
SL-014-SA5B-SB-4.0-5.0							
SL-019-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-9.0-10.0							
SL-030-SA5B-SB-4.0-5.0							
SL-030-SA5B-SB-9.0-10.0							J(all detects)
SL-034-SA5B-SB-4.0-5.0							UJ(all non-detects)
SL-034-SA5B-SB-9.0-10							
SL-035-SA5B-SB-4.0-5.0							
SL-035-SA5B-SB-7.0-8.0							
SL-036-SA5B-SB-4.0-5.0							
SL-037-SA5B-SB-3.5-4.5							
SL-294-SA5B-SB-4.0-5.0							
SL-294-SA5B-SB-9.0-10.0)							

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-019-SA5B-SB-4.0-5.0MS	FLUORIDE	66	-	80.00-120.00	-	FLUORIDE	
(SL-019-SA5B-SB-4.0-5.0							
SL-029-SA5B-SB-4.0-5.0							J(all detects)
SL-029-SA5B-SB-9.0-10.0							UJ(all non-detects)
SL-036-SA5B-SB-4.0-5.0							
SL-037-SA5B-SB-3.5-4.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_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-294-SA5B-SB-4.0-5.0MS SL-294-SA5B-SB-4.0-5.0MSD (SL-294-SA5B-SB-4.0-5.0)	EFH (C15-C20) EFH (C21-C30)	298 544	148 168	49.00-123.00 49.00-123.00	49 (20.00) 29 (20.00)	EFH (C15-C20) EFH (C21-C30)	J(all detects) EFH (C21-C30) No Qual, >4x
SL-294-SA5B-SB-4.0-5.0MS SL-294-SA5B-SB-4.0-5.0MSD (SL-294-SA5B-SB-4.0-5.0)	EFH (C8-C11)	0	0	49.00-123.00	-	EFH (C8-C11)	J(all detects) R(all non-detects)
SL-294-SA5B-SB-4.0-5.0MSD (SL-294-SA5B-SB-4.0-5.0)	EFH (C30-C40)	-	8	49.00-123.00	-	EFH (C30-C40)	No Qual, >4x

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-294-SA5B-SB-4.0-5.0MS SL-294-SA5B-SB-4.0-5.0MSD (SL-294-SA5B-SB-4.0-5.0)	Chlorotrifluoroethylene	146	148	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-294-SA5B-SB-4.0-5.0DUP (DUP19-SA5B-QC-012011 SL -014-SA5B-SB-4.0-5.0 SL -019-SA5B-SB-4.0-5.0 SL -029-SA5B-SB-4.0-5.0 SL -029-SA5B-SB-9.0-10.0 SL -030-SA5B-SB-4.0-5.0 SL -030-SA5B-SB-9.0-10.0 SL -034-SA5B-SB-4.0-5.0 SL -034-SA5B-SB-9.0-10 SL -035-SA5B-SB-4.0-5.0 SL -035-SA5B-SB-7.0-8.0 SL -036-SA5B-SB-4.0-5.0 SL -037-SA5B-SB-3.5-4.5 SL -294-SA5B-SB-4.0-5.0 SL -294-SA5B-SB-9.0-10.0)	Zirconium	27	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-294-SA5B-SB-4.0-5.0DUP	ANTIMONY	30	20.00	
(DUP19-SA5B-QC-012011	ARSENIC	21	20.00	
SL -014-SA5B-SB-4.0-5.0	BARIUM	58	20.00	
SL -019-SA5B-SB-4.0-5.0	SELENIUM	50	20.00	
SL -029-SA5B-SB-4.0-5.0				
SL -029-SA5B-SB-9.0-10.0				
SL -030-SA5B-SB-4.0-5.0				
SL -030-SA5B-SB-9.0-10.0				J(all detects) UJ(all non-detects)
SL -034-SA5B-SB-4.0-5.0				
SL -034-SA5B-SB-9.0-10				
SL -035-SA5B-SB-4.0-5.0				Sb, Se No Qual
SL -035-SA5B-SB-7.0-8.0				OK by difference
SL -036-SA5B-SB-4.0-5.0				
SL -037-SA5B-SB-3.5-4.5				
SL -294-SA5B-SB-4.0-5.0				
SL -294-SA5B-SB-9.0-10.0)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-294-SA5B-SB-4.0-5.0DUP (DUP19-SA5B-QC-012011 SL -014-SA5B-SB-4.0-5.0 SL -019-SA5B-SB-4.0-5.0 SL -029-SA5B-SB-4.0-5.0 SL -029-SA5B-SB-9.0-10.0 SL -030-SA5B-SB-4.0-5.0 SL -030-SA5B-SB-9.0-10.0 SL -034-SA5B-SB-4.0-5.0 SL -034-SA5B-SB-9.0-10 SL -035-SA5B-SB-4.0-5.0 SL -035-SA5B-SB-7.0-8.0 SL -036-SA5B-SB-4.0-5.0 SL -037-SA5B-SB-3.5-4.5 SL -294-SA5B-SB-4.0-5.0 SL -294-SA5B-SB-9.0-10.0)	HEXAVALENT CHROMIUM	52	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_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
P10240AQ251146A P10240AY251208A (TB-012011)	GASOLINE RANGE ORGANICS (	127	127	60.00-120.00	-	GASOLINE RANGE ORGANICS	J(all detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10251AQ240600A P10251AY240542A (EB23-SA5B-012011 EB24-SA5B-012011)	Aroclor 5442	50	52	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5LDLCSQ261036 (DUP19-SA5B-QC-012011 SL-014-SA5B-SB-4.0-5.0 SL-019-SA5B-SB-4.0-5.0 SL-029-SA5B-SB-4.0-5.0 SL-029-SA5B-SB-9.0-10.0 SL-030-SA5B-SB-4.0-5.0 SL-030-SA5B-SB-9.0-10.0 SL-034-SA5B-SB-4.0-5.0 SL-034-SA5B-SB-9.0-10 SL-035-SA5B-SB-4.0-5.0 SL-035-SA5B-SB-7.0-8.0 SL-036-SA5B-SB-4.0-5.0 SL-037-SA5B-SB-3.5-4.5 SL-294-SA5B-SB-4.0-5.0 SL-294-SA5B-SB-9.0-10.0)	3,3'-DICHLOROBENZIDINE	36	-	38.00-105.00	-	3,3'-DICHLOROBENZIDINE	J (all detects) UJ (all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_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*
LCS1B56Q211314A (DUP19 -SA5B -QC -012011 SL -014 -SA5B -SB -4.0 -5.0 SL -019 -SA5B -SB -4.0 -5.0 SL -029 -SA5B -SB -4.0 -5.0 SL -029 -SA5B -SB -9.0 -10.0 SL -030 -SA5B -SB -4.0 -5.0 SL -030 -SA5B -SB -9.0 -10.0 SL -034 -SA5B -SB -4.0 -5.0 SL -034 -SA5B -SB -9.0 -10 SL -035 -SA5B -SB -4.0 -5.0 SL -035 -SA5B -SB -7.0 -8.0 SL -036 -SA5B -SB -4.0 -5.0 SL -037 -SA5B -SB -3.5 -4.5 SL -294 -SA5B -SB -4.0 -5.0 SL -294 -SA5B -SB -9.0 -10.0)	Chlorotrifluoroethylene	152	-	22.00-131.00	-	Chlorotrifluoroethylene	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
MOISTURE	10.9	14.8	30		No Qualifiers Applied

Method: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
N-NITROSODIMETHYLAMINE	73.2	96.8	28	50.00	No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
FLUORIDE	4.0	6.0	40	50.00	No Qualifiers Applied
Nitrate-NO3	7.3	2.8	89	50.00	J(all detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
ALUMINUM	21300	28700	30	50.00	
BORON	6.19	4.24	37	50.00	
CALCIUM	8900	11700	27	50.00	
IRON	25800	26500	3	50.00	
LITHIUM	24.0	24.3	1	50.00	
MAGNESIUM	5760	6510	12	50.00	
MANGANESE	297	494	50	50.00	
PHOSPHORUS	391	260	40	50.00	No Qualifiers Applied
POTASSIUM	4140	2910	35	50.00	
SODIUM	502	444	12	50.00	
STRONTIUM	29.5	34.1	14	50.00	
TIN	2.62	2.94	12	50.00	
TITANIUM	1230	1340	9	50.00	
Zirconium	3.58	4.56	24	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-294-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP19-SA5B-QC-012011	Sample RPD	eQAPP RPD	Flag
ANTIMONY	0.265	0.189	33	50.00	
ARSENIC	5.17	5.75	11	50.00	
BARIUM	81.4	111	31	50.00	
BERYLLIUM	0.643	0.642	0	50.00	
CADMIUM	0.250	0.203	21	50.00	
CHROMIUM	25.1	26.9	7	50.00	
COBALT	6.85	6.03	13	50.00	
COPPER	12.0	13.2	10	50.00	No Qualifiers Applied
LEAD	7.88	6.77	15	50.00	
NICKEL	13.9	14.2	2	50.00	
SELENIUM	0.120	0.0867	32	50.00	
SILVER	0.0348	0.0408	16	50.00	
THALLIUM	0.290	0.289	0	50.00	
VANADIUM	45.0	44.3	2	50.00	
ZINC	61.9	60.3	3	50.00	
MOLYBDENUM	0.630	1.52	83	50.00	J(all detects)

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-294-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP19-SA5B-QC-012011	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.39	0.36	8	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-294-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP19-SA5B-QC-012011	Sample RPD	eQAPP RPD	Flag
EFH (C30-C40)	52	81	44	50.00	No Qualifiers Applied
EFH (C15-C20)	1.2	7.0 U	200	50.00	J(all detects)
EFH (C21-C30)	22	39	56	50.00	UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-294-SA5B-SB-4.0-5.0	Concentration (ug/Kg) DUP19-SA5B-QC-012011	Sample RPD	eQAPP RPD	Flag
AROCLOR 1254	0.72	0.66	9	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-294-SA5B-SB-4.0-5.0	Concentration (ug/Kg) DUP19-SA5B-QC-012011	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	1.2	0.56	73	50.00	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
BENZO(A)ANTHRACENE	1.2	2.0 U	200	50.00	
BENZO(A)PYRENE	1.1	2.0 U	200	50.00	
BENZO(B)FLUORANTHENE	1.5	2.0 U	200	50.00	
BENZO(G,H,I)PERYLENE	1.1	2.0 U	200	50.00	J(all detects)
CHRYSENE	2.1	0.71	99	50.00	UJ(all non-detects)
FLUORANTHENE	2.2	2.0 U	200	50.00	
NAPHTHALENE	1.9 U	0.94	200	50.00	
PYRENE	2.1	2.0 U	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
PH	8.53	8.42	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-294-SA5B-SB-4.0-5.0	DUP19-SA5B-QC-012011			
Oxidation Reduction Potential	348	353	1		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB23-SA5B-012011	LEAD	J	0.000054	0.0010	PQL	mg/L	J (all detects)
EB24-SA5B-012011	LEAD	J	0.000072	0.0010	PQL	mg/L	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5B-SB-7.0-8.0	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
DUP19-SA5B-QC-012011	BORON	J	4.24	5.81	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	11.6	PQL	mg/Kg	
	Zirconium	J	4.56	5.81	PQL	mg/Kg	
SL-014-SA5B-SB-4.0-5.0	BORON	J	3.94	5.55	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	11.1	PQL	mg/Kg	
	Zirconium	J	2.39	5.55	PQL	mg/Kg	
SL-019-SA5B-SB-4.0-5.0	TIN	J	2.54	11.0	PQL	mg/Kg	J (all detects)
SL-029-SA5B-SB-4.0-5.0	TIN	J	3.06	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.98	5.67	PQL	mg/Kg	
SL-029-SA5B-SB-9.0-10.0	BORON	J	3.04	5.47	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	10.9	PQL	mg/Kg	
	Zirconium	J	2.48	5.47	PQL	mg/Kg	
SL-030-SA5B-SB-4.0-5.0	BORON	J	5.60	5.69	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	11.4	PQL	mg/Kg	
	Zirconium	J	5.14	5.69	PQL	mg/Kg	
SL-030-SA5B-SB-9.0-10.0	TIN	J	2.69	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.05	5.73	PQL	mg/Kg	
SL-034-SA5B-SB-4.0-5.0	BORON	J	4.96	5.57	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	11.1	PQL	mg/Kg	
	Zirconium	J	3.32	5.57	PQL	mg/Kg	
SL-034-SA5B-SB-9.0-10	BORON	J	4.90	5.46	PQL	mg/Kg	J (all detects)
	TIN	J	2.66	10.9	PQL	mg/Kg	
	Zirconium	J	3.63	5.46	PQL	mg/Kg	
SL-035-SA5B-SB-4.0-5.0	BORON	J	2.51	5.39	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	10.8	PQL	mg/Kg	
	Zirconium	J	2.36	5.39	PQL	mg/Kg	
SL-035-SA5B-SB-7.0-8.0	BORON	J	3.22	5.25	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	10.5	PQL	mg/Kg	
	Zirconium	J	1.85	5.25	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5B-SB-4.0-5.0	BORON	J	2.89	5.42	PQL	mg/Kg	J (all detects)
	TIN	J	2.80	10.8	PQL	mg/Kg	
	Zirconium	J	1.30	5.42	PQL	mg/Kg	
SL-037-SA5B-SB-3.5-4.5	BORON	J	3.28	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	10.9	PQL	mg/Kg	
	Zirconium	J	1.50	5.44	PQL	mg/Kg	
SL-294-SA5B-SB-4.0-5.0	TIN	J	2.62	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.58	5.56	PQL	mg/Kg	
SL-294-SA5B-SB-9.0-10.0	BORON	J	2.46	5.34	PQL	mg/Kg	J (all detects)
	TIN	J	2.59	10.7	PQL	mg/Kg	
	Zirconium	J	1.95	5.34	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP19-SA5B-QC-012011	ANTIMONY	J	0.189	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0867	0.465	PQL	mg/Kg	
	SILVER	J	0.0408	0.116	PQL	mg/Kg	
SL-014-SA5B-SB-4.0-5.0	ANTIMONY	J	0.117	0.218	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.106	0.109	PQL	mg/Kg	
	SELENIUM	J	0.122	0.436	PQL	mg/Kg	
	SILVER	J	0.0300	0.109	PQL	mg/Kg	
SL-019-SA5B-SB-4.0-5.0	CADMIUM	J	0.0825	0.106	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.142	0.425	PQL	mg/Kg	
	SILVER	J	0.0259	0.106	PQL	mg/Kg	
SL-029-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0814	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0706	0.454	PQL	mg/Kg	
	SILVER	J	0.0368	0.113	PQL	mg/Kg	
SL-029-SA5B-SB-9.0-10.0	ANTIMONY	J	0.158	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0952	0.442	PQL	mg/Kg	
	SILVER	J	0.0354	0.111	PQL	mg/Kg	
SL-030-SA5B-SB-4.0-5.0	ANTIMONY	J	0.214	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.185	0.460	PQL	mg/Kg	
	SILVER	J	0.0446	0.115	PQL	mg/Kg	
SL-030-SA5B-SB-9.0-10.0	ANTIMONY	J	0.181	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.136	0.445	PQL	mg/Kg	
	SILVER	J	0.0347	0.111	PQL	mg/Kg	
SL-034-SA5B-SB-4.0-5.0	ANTIMONY	J	0.101	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0825	0.450	PQL	mg/Kg	
	SILVER	J	0.0341	0.113	PQL	mg/Kg	
SL-034-SA5B-SB-9.0-10	ANTIMONY	J	0.106	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0967	0.433	PQL	mg/Kg	
	SILVER	J	0.0277	0.108	PQL	mg/Kg	
SL-035-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0937	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.160	0.440	PQL	mg/Kg	
	SILVER	J	0.0213	0.110	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5B-SB-7.0-8.0	ANTIMONY	J	0.0893	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.416	PQL	mg/Kg	
	SILVER	J	0.0224	0.104	PQL	mg/Kg	
SL-036-SA5B-SB-4.0-5.0	ANTIMONY	J	0.110	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0879	0.442	PQL	mg/Kg	
	SILVER	J	0.0396	0.111	PQL	mg/Kg	
SL-037-SA5B-SB-3.5-4.5	ANTIMONY	J	0.0910	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0783	0.431	PQL	mg/Kg	
	SILVER	J	0.0273	0.108	PQL	mg/Kg	
SL-294-SA5B-SB-4.0-5.0	SELENIUM	J	0.120	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0348	0.110	PQL	mg/Kg	
SL-294-SA5B-SB-9.0-10.0	ANTIMONY	J	0.0920	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.431	PQL	mg/Kg	
	SILVER	J	0.0524	0.108	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP19-SA5B-QC-012011	HEXAVALENT CHROMIUM	J	0.36	1.2	PQL	mg/Kg	J (all detects)
SL-014-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-029-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-029-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-030-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.29	1.2	PQL	mg/Kg	J (all detects)
SL-030-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-034-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.1	PQL	mg/Kg	J (all detects)
SL-034-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-035-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)
SL-036-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-294-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-294-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5B-SB-4.0-5.0	MERCURY	J	0.0102	0.109	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5B-SB-9.0-10.0	METHANOL	J	310	560	PQL	ug/Kg	J (all detects)
SL-030-SA5B-SB-9.0-10.0	METHANOL	J	200	570	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	1.8	2.7	PQL	mg/Kg	J (all detects)
SL-035-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	2.0	2.6	PQL	mg/Kg	J (all detects)
SL-294-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	1.2	1.3	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP19-SA5B-QC-012011	AROCLOR 1254	J	0.66	2.0	PQL	ug/Kg	J (all detects)
SL-014-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.43	1.9	PQL	ug/Kg	J (all detects)
SL-029-SA5B-SB-4.0-5.0	AROCLOR 1254	J	1.3	1.9	PQL	ug/Kg	J (all detects)
SL-029-SA5B-SB-9.0-10.0	AROCLOR 1248 AROCLOR 1254	J J	0.81 1.5	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-030-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.66	2.0	PQL	ug/Kg	J (all detects)
SL-030-SA5B-SB-9.0-10.0	AROCLOR 1254	J	1.2	1.9	PQL	ug/Kg	J (all detects)
SL-034-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.78	1.9	PQL	ug/Kg	J (all detects)
SL-035-SA5B-SB-4.0-5.0	AROCLOR 1248 AROCLOR 1254	J J	0.57 1.2	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-035-SA5B-SB-7.0-8.0	AROCLOR 1254	J	1.6	1.8	PQL	ug/Kg	J (all detects)
SL-036-SA5B-SB-4.0-5.0	AROCLOR 1254	J	1.7	1.9	PQL	ug/Kg	J (all detects)
SL-037-SA5B-SB-3.5-4.5	AROCLOR 1254	J	0.59	1.9	PQL	ug/Kg	J (all detects)
SL-294-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.72	1.9	PQL	ug/Kg	J (all detects)
SL-294-SA5B-SB-9.0-10.0	AROCLOR 1254	J	0.65	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP19-SA5B-QC-012011	METHYLENE CHLORIDE	J	0.56	4.0	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-014-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.7	PQL	ug/Kg	J (all detects)
SL-019-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.93	4.1	PQL	ug/Kg	J (all detects)
SL-029-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.7	4.4	PQL	ug/Kg	J (all detects)
SL-029-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE	J	3.3	3.9	PQL	ug/Kg	J (all detects)
SL-030-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.58	4.1	PQL	ug/Kg	J (all detects)
SL-030-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.61	4.0	PQL	ug/Kg	J (all detects)
SL-034-SA5B-SB-9.0-10	BENZENE METHYLENE CHLORIDE TOLUENE	J J J	0.13 0.83 0.10	4.0 4.0 4.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-035-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.73	4.5	PQL	ug/Kg	J (all detects)
SL-035-SA5B-SB-7.0-8.0	METHYLENE CHLORIDE	J	0.67	4.1	PQL	ug/Kg	J (all detects)
SL-036-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.1	PQL	ug/Kg	J (all detects)
SL-037-SA5B-SB-3.5-4.5	METHYLENE CHLORIDE	J	1.1	4.4	PQL	ug/Kg	J (all detects)
SL-294-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	3.7	PQL	ug/Kg	J (all detects)
SL-294-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.86	3.3	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	380	PQL	ug/Kg	J (all detects)
SL-034-SA5B-SB-9.0-10	BIS(2-ETHYLHEXYL)PHTHALATE	J	55	370	PQL	ug/Kg	J (all detects)
SL-294-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	58	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP19-SA5B-QC-012011	BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE NAPHTHALENE	J J J	7.9 0.71 0.94	21 2.0 2.0	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-014-SA5B-SB-4.0-5.0	ANTHRACENE BENZO(A)ANTHRACENE BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate DIBENZO(A,H)ANTHRACENE Di-n-butylphthalate FLUORANTHENE PHENANTHRENE PYRENE	J J J J J J J J J	0.45 1.4 11 9.9 1.1 7.0 1.4 0.82 1.8	1.9 1.9 20 20 1.9 20 1.9 1.9 1.9	PQL PQL PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.93	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	21	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	21	PQL	ug/Kg	
SL-029-SA5B-SB-9.0-10.0	1-METHYLNAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
SL-030-SA5B-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.6	2.0	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.1	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.84	2.0	PQL	ug/Kg	
SL-030-SA5B-SB-9.0-10.0	2-METHYLNAPHTHALENE	J	0.79	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.8	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.8	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.6	21	PQL	ug/Kg	
	FLUORENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
SL-034-SA5B-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.5	20	PQL	ug/Kg	
SL-034-SA5B-SB-9.0-10	1-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	0.82	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.6	20	PQL	ug/Kg	
	FLUORENE	J	0.88	1.8	PQL	ug/Kg	
SL-035-SA5B-SB-4.0-5.0	2-METHYLNAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	0.77	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.93	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	15	20	PQL	ug/Kg	
	FLUORENE	J	0.85	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
SL-035-SA5B-SB-7.0-8.0	2-METHYLNAPHTHALENE	J	0.76	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.65	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.85	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.79	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	
SL-036-SA5B-SB-4.0-5.0	DIBENZO(A,H)ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	16	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.76	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE065 **Laboratory: LL**

EDD Filename: DE065_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-037-SA5B-SB-3.5-4.5	ANTHRACENE	J	0.39	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.80	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.83	1.9	PQL	ug/Kg	
SL-294-SA5B-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
SL-294-SA5B-SB-9.0-10.0	ANTHRACENE	J	0.47	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.2	20	PQL	ug/Kg	
	CHRYSENE	J	0.84	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.8	1.9	PQL	ug/Kg	
	PYRENE	J	0.90	1.9	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5B-SB-4.0-5.0	FORMALDEHYDE	J	1300	1700	PQL	ug/Kg	J (all detects)

LDC #: 25750P4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/11
SDG #: DE065 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer:
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn > 4x)
VII.	Duplicate Sample Analysis	N	D (Sb, Se, Zr < 5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB = 5, 8

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-014-SA5B-SB-4.0-5.0	11	SL-034-SA5B-SB-4.0-5.0	21		31	
2	SL-294-SA5B-SB-4.0-5.0 D	12	SL-034-SA5B-SB-9.0-10.0	22		32	
3	SL-294-SA5B-SB-9.0-10.0	13	SL-019-SA5B-SB-4.0-5.0	23		33	
4	DUP19-SA5B-QC-012011 D	14	SL-036-SA5B-SB-4.0-5.0	24		34	
5	EB23-SA5B-012011 W	15	SL-037-SA5B-SB-3.5-4.5	25		35	
6	SL-030-SA5B-SB-4.0-5.0	16	SL-029-SA5B-SB-4.0-5.0	26		36	
7	SL-030-SA5B-SB-9.0-10.0	17	SL-029-SA5B-SB-9.0-10.0	27		37	
8	EB24-SA5B-012011 W	18	SL-294-SA5B-SB-4.0-5.0MS	28		38	
9	SL-035-SA5B-SB-4.0-5.0	19	SL-294-SA5B-SB-4.0-5.0MSD	29		39	
10	SL-035-SA5B-SB-7.0-8.0	20	SL-294-SA5B-SB-4.0-5.0DUP	30		40	

Notes:

LDC #: 25750P 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Quals															
Zr			4.1	2.05																

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3, 4, 6, 7, 9-14

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	3	10	14													
Zr			4.5	2.25	2.0	1.9	1.3													

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 15-17

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	15	16	17													
Zr			5.2	2.6	1.5	2.0	2.5													

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 #: 25750P4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CR
2nd Reviewer: A

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?
Blank units: ug/L **Associated sample units:** mg/Kg
Sampling date: 1/20/11 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Blank ID	Sample Identification										
	5	8	Action Level	No Qualifiers									
Pb	0.054	0.072	0.036										

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".

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE065
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6189213BKG Serial Dilution Lab Sample ID: 6189213L
Batch ID(s): P02508B, P02526A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		191943.3400		188723.4500		2		P
Antimony	121	1.2020		1.5000	U	100		MS
Arsenic	75	23.4800		27.4450		17		MS
Barium	137	369.7000		385.9000		4		MS
Beryllium	9	2.9210		3.3150		13		MS
Boron		55.6600		56.0500	B	1		P
Cadmium	111	1.1360		1.2540	B	10		MS
Calcium		80104.5400		84470.6500		5		P
Chromium	52	114.0000		125.5500		10		MS
Cobalt	59	31.1100		35.5250		14	E	MS
Copper	63	54.6200		64.0000		17	E	MS
Iron		232001.1900		224107.3500		3		P
Lead	208	35.7900		34.6550		3		MS
Lithium		216.0200		224.1500		4		P
Magnesium		51803.9000		53037.7500		2		P
Manganese		2672.1500		2819.2000		6		P
Molybdenum	98	2.8630		3.0275		6		MS
Nickel	60	63.0800		71.5000		13	E	MS
Phosphorus		3518.3600		3482.1000		1		P
Potassium		37256.4800		38535.6500		3		P
Selenium	78	0.5439	B	1.0000	U	100		MS
Silver	107	0.1581	B	0.3000	U	100		MS
Sodium		4517.6700		4635.4500	B	3		P
Strontium		265.6400		271.2500		2		P
Thallium	203	1.3190		1.3020	B	1		MS
Tin		23.5600	B	50.0000	U	100		P
Titanium		11104.0400		11440.0500		3		P
Vanadium	51	204.3000		228.0500		12	E	MS
Zinc	66	281.3000		294.2000		5		MS
Zirconium		32.1800	B	51.9000	B	61		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE065 5126

SAMPLE DELIVERY GROUP

DE066

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-Jan-2011	TB-012111	6189714	TB	5030B	8015M	IV
21-Jan-2011	TB-012111	6189714	TB	5030B	8260B	IV
21-Jan-2011	TB-012111	6189714	TB	5030B	8260B SIM	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3050B	6010B	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3050B	6020	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3060A	7199	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3546	1625C	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3550B	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3550B	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3550B	8082	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3550B	8270C	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	3550B	8270C SIM	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	5035	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	5035	8260B	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	5035	8260B SIM	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	8330	8330A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	Gen Prep	9045M	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	300.0	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	314.0	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	6850	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	7471A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	8315A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0	6189701	N	METHOD	9012B	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0DUP	P189701D271025B	DUP	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MSD	P189701M240517A	MSD	8330	8330A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MSD	P189701M241909A	MSD	METHOD	8315A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MSD	P189701M261422	MSD	3546	1625C	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MS	P189701R240435A	MS	8330	8330A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MS	P189701R241859A	MS	METHOD	8315A	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MS	P189701R261405	MS	3546	1625C	IV
21-Jan-2011	SL-308-SA5B-SB-4.0-5.0MS	P189701R271027B	MS	METHOD	9012B	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3050B	6010B	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3050B	6020	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3060A	7199	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3546	1625C	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3550B	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3550B	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3550B	8082	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3550B	8270C	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	3550B	8270C SIM	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	5035	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	5035	8260B	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	5035	8260B SIM	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	8330	8330A	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	Gen Prep	9045M	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	300.0	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	314.0	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	7471A	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	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
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	8315A	IV
21-Jan-2011	SL-308-SA5B-SB-9.0-10.0	6189702	N	METHOD	9012B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3050B	6010B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3050B	6020	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3060A	7199	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3546	1625C	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3550B	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3550B	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3550B	8082	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3550B	8270C	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	3550B	8270C SIM	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	5035	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	5035	8260B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	5035	8260B SIM	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	8330	8330A	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	Gen Prep	9045M	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	300.0	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	314.0	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	7471A	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	8015M	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	8315A	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15	6189703	N	METHOD	9012B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15DUP	P189703D291000B	DUP	Gen Prep	9045M	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15MSD	P189703M320551A	MSD	METHOD	8015B	IV
21-Jan-2011	SL-308-SA5B-SB-14.0-15MS	P189703R320537A	MS	METHOD	8015B	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
21-Jan-2011	EB25-SA5B-012111	6189704	EB	3510C	8015B	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	3510C	8015M	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	3520C	1625C	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	5030B	8015M	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	8330	8330A	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	Gen Prep	300.0	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	Gen Prep	8015B	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	Gen Prep	8015M	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	Gen Prep	9040B	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	METHOD	8315A	IV
21-Jan-2011	EB25-SA5B-012111	6189704	EB	METHOD	9012B	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	3050B	6010B	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	3050B	6020	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	3060A	7199	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	3550B	8082	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	3550B	8270C	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	3550B	8270C SIM	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	5035	8260B	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	5035	8260B SIM	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	Gen Prep	9045M	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	METHOD	300.0	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	METHOD	314.0	IV
21-Jan-2011	DUP20-SA5B-QC-012111	6189710	FD	METHOD	7471A	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	3050B	6010B	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	3050B	6020	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	3060A	7199	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
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	3550B	8082	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	3550B	8270C	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	3550B	8270C SIM	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	5035	8260B	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	5035	8260B SIM	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	Gen Prep	9045M	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	METHOD	300.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	METHOD	314.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0	6189705	N	METHOD	7471A	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	3050B	6010B	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	3050B	6020	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	3060A	7199	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	3550B	8082	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	3550B	8270C	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	3550B	8270C SIM	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	5035	8260B	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	5035	8260B SIM	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	METHOD	300.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	METHOD	314.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	6189706	MS	METHOD	7471A	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	3050B	6010B	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	3050B	6020	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	3550B	8082	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	3550B	8270C	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	3550B	8270C SIM	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	5035	8260B	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
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	5035	8260B SIM	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MSD	6189707	MSD	METHOD	7471A	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	3050B	6010B	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	3050B	6020	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	3060A	7199	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	Gen Prep	9045M	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	METHOD	300.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	METHOD	314.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	6189708	DUP	METHOD	7471A	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0DUP	P189705D271412A	DUP	METHOD	300.0	IV
21-Jan-2011	SL-253-SA5B-SB-3.0-4.0MS	P189705R271427A	MS	METHOD	300.0	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	3050B	6010B	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	3050B	6020	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	3060A	7199	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	3550B	8082	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	3550B	8270C	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	3550B	8270C SIM	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	5035	8260B	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	5035	8260B SIM	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	Gen Prep	9045M	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	METHOD	300.0	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	METHOD	314.0	IV
21-Jan-2011	SL-254-SA5B-SB-3.5-4.5	6189709	N	METHOD	7471A	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3050B	6010B	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3050B	6020	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	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
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3546	1625C	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3550B	8015B	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3550B	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3550B	8082	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3550B	8270C	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	3550B	8270C SIM	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	5035	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	5035	8260B	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	5035	8260B SIM	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	8330	8330A	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	Gen Prep	9045M	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	300.0	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	314.0	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	7471A	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	8015B	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	8315A	IV
21-Jan-2011	SL-307-SA5B-SB-4.0-5.0	6189711	N	METHOD	9012B	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3050B	6010B	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3050B	6020	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3060A	7199	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3546	1625C	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3550B	8015B	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3550B	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3550B	8082	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3550B	8270C	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
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	3550B	8270C SIM	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	5035	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	5035	8260B	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	5035	8260B SIM	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	8330	8330A	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	Gen Prep	9045M	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	300.0	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	314.0	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	7471A	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	8015B	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	8315A	IV
21-Jan-2011	SL-307-SA5B-SB-9.0-10.0	6189712	N	METHOD	9012B	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3050B	6010B	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3050B	6020	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3060A	7199	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3546	1625C	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3550B	8015B	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3550B	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3550B	8082	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3550B	8270C	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	3550B	8270C SIM	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	5035	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	5035	8260B	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	5035	8260B SIM	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	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
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	Gen Prep	9045M	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	METHOD	300.0	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	METHOD	314.0	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	METHOD	7471A	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	METHOD	8015B	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	METHOD	8015M	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	N	METHOD	8315A	IV
21-Jan-2011	SL-307-SA5B-SB-14.0-15.0	6189713	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: DE066 **Laboratory:** LL

EDD Filename: DE066_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: EM

Method: 9040B **Matrix:** AQ

Sample ID: EB25-SA5B-012111 *Collected:* 1/21/2011 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
PH	6.2		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 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
FLUORIDE	1.8		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-254-SA5B-SB-3.5-4.5 *Collected:* 1/21/2011 1:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.8		0.98	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.98	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *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		0.89	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.7		0.97	MDL	1.2	PQL	mg/Kg	J	Q
Nitrate-NO3	1.6	J	0.97	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *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
Nitrate-NO3	1.3	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 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	2.4		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *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		0.88	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.5	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.77	J	0.990	MDL	5.56	PQL	mg/Kg	J	Z
PHOSPHORUS	217		0.623	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2170		20.0	MDL	55.6	PQL	mg/Kg	J	Q
TIN	2.29	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.20	J	0.935	MDL	5.56	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 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
BORON	1.49	J	1.01	MDL	5.67	PQL	mg/Kg	J	Z
PHOSPHORUS	180		0.635	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	1890		20.4	MDL	56.7	PQL	mg/Kg	J	Q
TIN	2.79	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.26	J	0.952	MDL	5.67	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5B-SB-3.5-4.5 *Collected:* 1/21/2011 1:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	410		0.596	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2110		19.1	MDL	53.2	PQL	mg/Kg	J	Q
TIN	2.66	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.893	MDL	5.32	PQL	mg/Kg	U	B

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	340		0.679	MDL	12.1	PQL	mg/Kg	J	Q
POTASSIUM	3630		21.8	MDL	60.6	PQL	mg/Kg	J	Q
TIN	2.08	J	1.21	MDL	12.1	PQL	mg/Kg	U	B
Zirconium	6.03	J	1.02	MDL	6.06	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.37	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
PHOSPHORUS	234		0.597	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1700		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	2.45	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.895	MDL	5.33	PQL	mg/Kg	U	B

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.46	J	1.05	MDL	5.92	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	263		0.663	MDL	11.8	PQL	mg/Kg	J	Q
POTASSIUM	3530		21.3	MDL	59.2	PQL	mg/Kg	J	Q
TIN	2.46	J	1.18	MDL	11.8	PQL	mg/Kg	U	B
Zirconium	5.74	J	0.995	MDL	5.92	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.64	J	0.982	MDL	5.52	PQL	mg/Kg	J	Z
PHOSPHORUS	360		0.618	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2850		19.9	MDL	55.2	PQL	mg/Kg	J	Q
TIN	2.02	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.55	J	0.927	MDL	5.52	PQL	mg/Kg	U	B

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 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
BORON	1.65	J	0.970	MDL	5.45	PQL	mg/Kg	J	Z
PHOSPHORUS	297		0.611	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2620		19.6	MDL	54.5	PQL	mg/Kg	J	Q
SODIUM	92.8	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	1.91	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.16	J	0.916	MDL	5.45	PQL	mg/Kg	U	B

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.51	J	0.970	MDL	5.45	PQL	mg/Kg	J	Z
PHOSPHORUS	495		0.611	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2870		19.6	MDL	54.5	PQL	mg/Kg	J	Q
SODIUM	101	J	40.7	MDL	109	PQL	mg/Kg	J	Z
TIN	1.79	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.30	J	0.916	MDL	5.45	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	32.9		0.136	MDL	0.454	PQL	mg/Kg	J	Q

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.155	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0711	J	0.0681	MDL	0.227	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.08		0.0908	MDL	0.454	PQL	mg/Kg	J	Q
BERYLLIUM	0.910		0.0182	MDL	0.113	PQL	mg/Kg	J	Q
LEAD	8.38		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, Q
SILVER	0.0524	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.374		0.0340	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 1:15:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	32.4		0.135	MDL	0.449	PQL	mg/Kg	J	Q

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 1:15:00 *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	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 1:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0924	J	0.0673	MDL	0.224	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.53		0.0898	MDL	0.449	PQL	mg/Kg	J	Q
BERYLLIUM	0.935		0.0180	MDL	0.112	PQL	mg/Kg	J	Q
LEAD	7.43		0.0117	MDL	0.224	PQL	mg/Kg	J	Q, Q
SILVER	0.0562	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: SL-253-SA5B-SB-3.0-4.0 ***Collected:*** 1/21/2011 1:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.334		0.0337	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-254-SA5B-SB-3.5-4.5 ***Collected:*** 1/21/2011 1:59:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	39.6		0.131	MDL	0.438	PQL	mg/Kg	J	Q

Sample ID: SL-254-SA5B-SB-3.5-4.5 ***Collected:*** 1/21/2011 1:59:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0618	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5B-SB-3.5-4.5 ***Collected:*** 1/21/2011 1:59:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0746	J	0.0657	MDL	0.219	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.31		0.0876	MDL	0.438	PQL	mg/Kg	J	Q
BERYLLIUM	0.941		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
LEAD	14.8		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, Q
SILVER	0.0303	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.386		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-14.0-15.0 ***Collected:*** 1/21/2011 3:18:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	39.2		0.145	MDL	0.485	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-14.0-15.0 ***Collected:*** 1/21/2011 3:18:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0485	MDL	0.485	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-14.0-15.0 ***Collected:*** 1/21/2011 3:18:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0788	J	0.0727	MDL	0.242	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: SL-307-SA5B-SB-14.0-15.0 ***Collected:*** 1/21/2011 3:18:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	5.61		0.0969	MDL	0.485	PQL	mg/Kg	J	Q
BERYLLIUM	0.819		0.0194	MDL	0.121	PQL	mg/Kg	J	Q
LEAD	9.41		0.0126	MDL	0.242	PQL	mg/Kg	J	Q, Q
SILVER	0.0449	J	0.0145	MDL	0.121	PQL	mg/Kg	J	Z
THALLIUM	0.325		0.0364	MDL	0.121	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 2:58:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	23.5		0.132	MDL	0.439	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 2:58:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 2:58:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	U	0.0659	MDL	0.220	PQL	mg/Kg	R	Q
ARSENIC	4.78		0.0878	MDL	0.439	PQL	mg/Kg	J	Q
BERYLLIUM	0.765		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
LEAD	6.07		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, Q
SILVER	0.0356	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.246		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 3:08:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	45.5		0.145	MDL	0.483	PQL	mg/Kg	J	Q

Sample ID: SL-307-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 3:08:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0891	J	0.0483	MDL	0.483	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: SL-307-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 3:08:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0946	J	0.0725	MDL	0.242	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.94		0.0966	MDL	0.483	PQL	mg/Kg	J	Q
BERYLLIUM	0.976		0.0193	MDL	0.121	PQL	mg/Kg	J	Q
LEAD	11.1		0.0126	MDL	0.242	PQL	mg/Kg	J	Q, Q
SILVER	0.0581	J	0.0145	MDL	0.121	PQL	mg/Kg	J	Z
THALLIUM	0.369		0.0362	MDL	0.121	PQL	mg/Kg	J	Q

Sample ID: SL-308-SA5B-SB-14.0-15 ***Collected:*** 1/21/2011 11:39:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	19.3		0.132	MDL	0.442	PQL	mg/Kg	J	Q

Sample ID: SL-308-SA5B-SB-14.0-15 ***Collected:*** 1/21/2011 11:39:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-14.0-15 ***Collected:*** 1/21/2011 11:39:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0878	J	0.0662	MDL	0.221	PQL	mg/Kg	UJ	Q, B
ARSENIC	3.74		0.0883	MDL	0.442	PQL	mg/Kg	J	Q
BERYLLIUM	0.477		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0662	J	0.0442	MDL	0.110	PQL	mg/Kg	J	Z
LEAD	7.03		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, Q
SILVER	0.0249	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.285		0.0331	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-308-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 11:15:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	15.6		0.130	MDL	0.432	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: SL-308-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 11:15:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 11:15:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0648	U	0.0648	MDL	0.216	PQL	mg/Kg	R	Q
ARSENIC	3.72		0.0864	MDL	0.432	PQL	mg/Kg	J	Q
BERYLLIUM	0.502		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.0821	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z
LEAD	4.89		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, Q
SILVER	0.0281	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
THALLIUM	0.231		0.0324	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-308-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 11:29:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	20.9		0.126	MDL	0.420	PQL	mg/Kg	J	Q

Sample ID: SL-308-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 11:29:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 11:29:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0629	U	0.0629	MDL	0.210	PQL	mg/Kg	R	Q
ARSENIC	4.00		0.0839	MDL	0.420	PQL	mg/Kg	J	Q
BERYLLIUM	0.549		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
LEAD	5.39		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, Q
SILVER	0.0309	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
THALLIUM	0.241		0.0315	MDL	0.105	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: DUP20-SA5B-QC-012111 ***Collected:*** 1/21/2011 1:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA5B-SB-3.0-4.0 ***Collected:*** 1/21/2011 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
HEXAVALENT CHROMIUM	0.41	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-14.0-15.0 ***Collected:*** 1/21/2011 3:18:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 2:58:00 ***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	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 3:08:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-14.0-15 ***Collected:*** 1/21/2011 11:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-4.0-5.0 ***Collected:*** 1/21/2011 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	0.50	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-9.0-10.0 ***Collected:*** 1/21/2011 11:29:00 ***Analysis Type:*** RES ***Dilution:*** 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 Matrix: SO

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-254-SA5B-SB-3.5-4.5 *Collected:* 1/21/2011 1:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0043	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0180	J	0.0034	MDL	0.117	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0623	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0112	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C Matrix: AQ

Sample ID: EB25-SA5B-012111 *Collected:* 1/21/2011 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	1.39		0.531	MDL	1.06	PQL	ng/L	U	B

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *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	30.5	J	20.1	MDL	40.3	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *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	31.7	J	18.4	MDL	36.7	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.1	U	6.1	MDL	15	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	6.1	U	6.1	MDL	15	PQL	mg/Kg	UJ	C
Propylene glycol	6.1	U	6.1	MDL	15	PQL	mg/Kg	UJ	C

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *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)	0.50	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *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	15	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	6.0	U	6.0	MDL	15	PQL	mg/Kg	UJ	C
Propylene glycol	6.0	U	6.0	MDL	15	PQL	mg/Kg	UJ	C

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *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)	1.1	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* RES *Dilution:* 24.75

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	0.2	J	0.2	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 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 (C15-C20)	0.52	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	6.6	U	6.6	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	C

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *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	3.8	PQL	ug/Kg	UJ	C

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 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
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory:** LL

EDD Filename: DE066_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-254-SA5B-SB-3.5-4.5 *Collected:* 1/21/2011 1:59:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *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	4.0	PQL	ug/Kg	UJ	C

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *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	4.0	PQL	ug/Kg	UJ	C

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.3		0.36	MDL	1.9	PQL	ug/Kg	J	*XIII
AROCLOR 1260	0.79	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L, C
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L, C

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 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 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	C

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *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 1254	0.67	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 1:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3900	PQL	ug/Kg	UJ	Q

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

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *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	0.62	J	0.41	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *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	13	J	7.2	MDL	22	PQL	ug/Kg	J	Z

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	0.93	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 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
BENZO(B)FLUORANTHENE	2.2		0.76	MDL	1.9	PQL	ug/Kg	J	*XII
BENZO(K)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	*XII
CHRYSENE	0.66	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *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(B)FLUORANTHENE	2.9		0.73	MDL	1.8	PQL	ug/Kg	J	*XII
BENZO(K)FLUORANTHENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	*XII
CHRYSENE	1.5	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.91	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8315A **Matrix:** AQ

Sample ID: EB25-SA5B-012111 *Collected:* 1/21/2011 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
FORMALDEHYDE	10	J	10	MDL	50	PQL	ug/L	U	B

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 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
PETN	910	U	910	MDL	2700	PQL	ug/Kg	UJ	Q

Method Category: VOA **Method:** 8015B **Matrix:** SO

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	550	J	120	MDL	610	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: TB-012111 *Collected:* 1/21/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROMETHANE	1	U	1	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: DUP20-SA5B-QC-012111 *Collected:* 1/21/2011 1:04:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.6	U	1.6	MDL	8.0	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.50	U	0.50	MDL	5.0	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.41	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-253-SA5B-SB-3.0-4.0 *Collected:* 1/21/2011 1:15:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.6	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.48	U	0.48	MDL	4.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.39	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-254-SA5B-SB-3.5-4.5 *Collected:* 1/21/2011 1:59:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.7	U	1.7	MDL	8.5	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.53	U	0.53	MDL	5.3	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.45	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-307-SA5B-SB-14.0-15.0 *Collected:* 1/21/2011 3:18:00 *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.0	J	1.2	MDL	7.8	PQL	ug/Kg	U	B
2-HEXANONE	1.6	U	1.6	MDL	7.8	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.8	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.49	U	0.49	MDL	4.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.42	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory:** LL

EDD Filename: DE066_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-307-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 2:58:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.5	J	1.3	MDL	8.3	PQL	ug/Kg	J	Z
2-HEXANONE	1.7	U	1.7	MDL	8.3	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.40	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-307-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 3:08:00 *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)	4.2	J	1.3	MDL	8.5	PQL	ug/Kg	U	B
2-HEXANONE	1.7	U	1.7	MDL	8.5	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.41	U	0.41	MDL	8.5	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.53	U	0.53	MDL	5.3	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.60	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	5.1	J	1.3	MDL	8.2	PQL	ug/Kg	J	Z
2-HEXANONE	1.6	U	1.6	MDL	8.2	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.41	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-308-SA5B-SB-4.0-5.0 *Collected:* 1/21/2011 11:15:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.5	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.47	U	0.47	MDL	4.7	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.48	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.7	PQL	ug/Kg	UJ	C
Chlorotrifluoroethylene	0.48	U	0.48	MDL	4.8	PQL	ug/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-308-SA5B-SB-9.0-10.0 *Collected:* 1/21/2011 11:29:00 *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	0.49	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Method Category: VOA

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

Sample ID: SL-308-SA5B-SB-14.0-15 *Collected:* 1/21/2011 11:39:00 *Analysis Type:* RES *Dilution:* 21.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,4-DIOXANE	9.0	J	4.8	MDL	15	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_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
*XII and 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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE066

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9040B **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB25-SA5B-012111 (RES)	Sampling To Analysis	81.00	48.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI02B262256	1/29/2011 10:56:00 PM	N-NITROSODIMETHYLAMINE	3.39 ng/L	EB25-SA5B-012111

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
EB25-SA5B-012111(RES)	N-NITROSODIMETHYLAMINE	1.39 ng/L	1.39U ng/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02608AB221623	1/29/2011 4:23:00 PM	IRON PHOSPHORUS TIN	4.69 mg/Kg 0.964 mg/Kg 1.04 mg/Kg	DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-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
DUP20-SA5B-QC-012111(RES)	TIN	2.29 mg/Kg	2.29U mg/Kg
SL-253-SA5B-SB-3.0-4.0(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-254-SA5B-SB-3.5-4.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-307-SA5B-SB-14.0-15.0(RES)	TIN	2.08 mg/Kg	2.08U mg/Kg
SL-307-SA5B-SB-4.0-5.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-307-SA5B-SB-9.0-10.0(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-308-SA5B-SB-14.0-15(RES)	TIN	2.02 mg/Kg	2.02U mg/Kg
SL-308-SA5B-SB-4.0-5.0(RES)	TIN	1.91 mg/Kg	1.91U mg/Kg
SL-308-SA5B-SB-9.0-10.0(RES)	TIN	1.79 mg/Kg	1.79U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02626BB220037A	2/3/2011 12:37:00 AM	COPPER	0.161 mg/Kg	DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB55B211454A	1/24/2011 2:54:00 PM	METHYLENE CHLORIDE TOLUENE	0.50 ug/Kg 0.25 ug/Kg	DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0
VBLKB56B211215A	1/25/2011 12:15:00 PM	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	5.1 ug/Kg 2.0 ug/Kg 0.29 ug/Kg	SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-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
DUP20-SA5B-QC-012111(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	4.0U ug/Kg
SL-253-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.39 ug/Kg	3.8U ug/Kg
SL-254-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	4.3U ug/Kg
SL-307-SA5B-SB-14.0-15.0(RES)	2-BUTANONE (MEK)	2.0 ug/Kg	7.8U ug/Kg
SL-307-SA5B-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	3.9U ug/Kg
SL-307-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	4.1U ug/Kg
SL-307-SA5B-SB-9.0-10.0(RES)	2-BUTANONE (MEK)	4.2 ug/Kg	8.5U ug/Kg
SL-307-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	4.2U ug/Kg
SL-308-SA5B-SB-14.0-15(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	4.1U ug/Kg
SL-308-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	3.8U ug/Kg
SL-308-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.8U ug/Kg
SL-308-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.49 ug/Kg	3.8U ug/Kg
SL-308-SA5B-SB-9.0-10.0(RES)	TOLUENE	0.09 ug/Kg	3.8U ug/Kg

Method: **8315A**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P24245AB241938A	1/24/2011 7:38:00 PM	FORMALDEHYDE	12 ug/L	EB25-SA5B-012111

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
EB25-SA5B-012111(RES)	FORMALDEHYDE	10 ug/L	50U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE066 | Laboratory: LL

EDD Filename: DE066_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-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (SL-253-SA5B-SB-3.0-4.0)	BENZIDINE	26	17	35.00-141.00	39 (30.00)	BENZIDINE	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-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	ARSENIC	170	163	75.00-125.00	-	ARSENIC	J(all detects)
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	ANTIMONY	20	23	75.00-125.00	-	ANTIMONY	J(all detects) R(all non-detects)
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	BERYLLIUM CHROMIUM LEAD THALLIUM VANADIUM	74 74 126 68 -	72 72 74 - 50	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	BERYLLIUM CHROMIUM LEAD THALLIUM VANADIUM	J(all detects) UJ(all non-detects) V No Qual, >4x
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	BARIUM	-280	-287	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_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-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	MAGNESIUM	152	132	75.00-125.00	-	MAGNESIUM	No Qual, >4x
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	ALUMINUM CALCIUM IRON MANGANESE	-1042 2 -4116 -359	-1621 3 -3752 -344	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM CALCIUM IRON MANGANESE	No Qual, >4x
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	PHOSPHORUS POTASSIUM	69 62	- 56	75.00-125.00 75.00-125.00	- -	PHOSPHORUS POTASSIUM	J(all detects) UJ(all non-detects)
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	TITANIUM	205	204	75.00-125.00	-	TITANIUM	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-253-SA5B-SB-3.0-4.0MS (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	FLUORIDE	74	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-308-SA5B-SB-4.0-5.0MS (SL-308-SA5B-SB-4.0-5.0)	PETN	79	-	80.00-121.00	-	PETN	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD (SL-253-SA5B-SB-3.0-4.0)	1,2,3-TRICHLOROBENZENE	-	-	10.00-140.00	38 (30.00)	1,2,3-TRICHLOROBENZENE	J(all detects)
	1,2,4-TRICHLOROBENZENE	-	-	10.00-136.00	33 (30.00)	1,2,4-TRICHLOROBENZENE	
	2-BUTANONE (MEK)	-	-	37.00-163.00	33 (30.00)	2-BUTANONE (MEK)	
	ACETONE	-	-	15.00-210.00	43 (30.00)	ACETONE	
	Chlorotrifluoroethylene	173	163	70.00-130.00	-	Chlorotrifluoroethylene	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-253-SA5B-SB-3.0-4.0DUP (DUP20-SA5B-QC-012111 SL -253-SA5B-SB-3.0-4.0 SL -254-SA5B-SB-3.5-4.5 SL -307-SA5B-SB-14.0-15.0 SL -307-SA5B-SB-4.0-5.0 SL -307-SA5B-SB-9.0-10.0 SL -308-SA5B-SB-14.0-15 SL -308-SA5B-SB-4.0-5.0 SL -308-SA5B-SB-9.0-10.0)	Nitrate-NO3	28	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-253-SA5B-SB-3.0-4.0DUP (DUP20-SA5B-QC-012111 SL -253-SA5B-SB-3.0-4.0 SL -254-SA5B-SB-3.5-4.5 SL -307-SA5B-SB-14.0-15.0 SL -307-SA5B-SB-4.0-5.0 SL -307-SA5B-SB-9.0-10.0 SL -308-SA5B-SB-14.0-15 SL -308-SA5B-SB-4.0-5.0 SL -308-SA5B-SB-9.0-10.0)	HEXAVALENT CHROMIUM	68	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_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
P02626BQ221458A (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	ANTIMONY	68	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10345AQ241538A P10345AY241519A (SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-9.0-10.0)	Aroclor 5442	59	60	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B55Q211516A (DUP20-SA5B-QC-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-14.0-15 SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0)	Chlorotrifluoroethylene	158	-	22.00-131.00	-	Chlorotrifluoroethylene	J(all detects)
LCS1B56Q211314A (SL-307-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-9.0-10.0)	Chlorotrifluoroethylene	152	-	22.00-131.00	-	Chlorotrifluoroethylene	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
MOISTURE	13.5	13.6	1		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
FLUORIDE	1.8	1.6	12	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
ALUMINUM	27600	26200	5	50.00	No Qualifiers Applied
BORON	1.49	1.77	17	50.00	
CALCIUM	3320	3110	7	50.00	
IRON	27900	29400	5	50.00	
LITHIUM	33.6	30.7	9	50.00	
MAGNESIUM	4810	4750	1	50.00	
MANGANESE	406	647	46	50.00	
PHOSPHORUS	180	217	19	50.00	
POTASSIUM	1890	2170	14	50.00	
SODIUM	147	136	8	50.00	
STRONTIUM	30.6	30.7	0	50.00	
TIN	2.79	2.29	20	50.00	
TITANIUM	1530	1500	2	50.00	
Zirconium	3.26	3.20	2	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
ANTIMONY	0.0924	0.0711	26	50.00	No Qualifiers Applied
ARSENIC	5.53	6.08	9	50.00	
BARIUM	141	160	13	50.00	
BERYLLIUM	0.935	0.910	3	50.00	
CADMIUM	0.154	0.234	41	50.00	
CHROMIUM	32.4	32.9	2	50.00	
COBALT	7.70	10.8	34	50.00	
COPPER	14.1	14.1	0	50.00	
LEAD	7.43	8.38	12	50.00	
MOLYBDENUM	0.449	0.530	17	50.00	
NICKEL	19.3	22.1	14	50.00	
SELENIUM	0.199	0.155	25	50.00	
SILVER	0.0562	0.0524	7	50.00	
THALLIUM	0.334	0.374	11	50.00	
VANADIUM	58.1	58.9	1	50.00	
ZINC	51.8	60.2	15	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE066 | Laboratory: LL

EDD Filename: DE066_v1 | eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
HEXAVALENT CHROMIUM	0.41	0.34	19	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
METHYLENE CHLORIDE	0.39	0.41	5	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
PH	6.14	6.87	11	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
Oxidation Reduction Potential	476	531	11		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE066 Laboratory: LL

EDD Filename: DE066_v1 eQAPP Name: CDM_SSFL_110509

Method: 8315A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB25-SA5B-012111	FORMALDEHYDE	J	10	50	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-307-SA5B-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	30.5	40.3	PQL	ng/Kg	J (all detects)
SL-308-SA5B-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	31.7	36.7	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-307-SA5B-SB-14.0-15.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-9.0-10.0	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-14.0-15	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-9.0-10.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP20-SA5B-QC-012111	BORON	J	1.77	5.56	PQL	mg/Kg	J (all detects)
	TIN	J	2.29	11.1	PQL	mg/Kg	
	Zirconium	J	3.20	5.56	PQL	mg/Kg	
SL-253-SA5B-SB-3.0-4.0	BORON	J	1.49	5.67	PQL	mg/Kg	J (all detects)
	TIN	J	2.79	11.3	PQL	mg/Kg	
	Zirconium	J	3.26	5.67	PQL	mg/Kg	
SL-254-SA5B-SB-3.5-4.5	TIN	J	2.66	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.39	5.32	PQL	mg/Kg	
SL-307-SA5B-SB-14.0-15.0	TIN	J	2.08	12.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	6.03	6.06	PQL	mg/Kg	
SL-307-SA5B-SB-4.0-5.0	BORON	J	1.37	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.7	PQL	mg/Kg	
	Zirconium	J	2.09	5.33	PQL	mg/Kg	
SL-307-SA5B-SB-9.0-10.0	BORON	J	5.46	5.92	PQL	mg/Kg	J (all detects)
	TIN	J	2.46	11.8	PQL	mg/Kg	
	Zirconium	J	5.74	5.92	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-308-SA5B-SB-14.0-15	BORON	J	1.64	5.52	PQL	mg/Kg	J (all detects)
	TIN	J	2.02	11.0	PQL	mg/Kg	
	Zirconium	J	1.55	5.52	PQL	mg/Kg	
SL-308-SA5B-SB-4.0-5.0	BORON	J	1.65	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	92.8	109	PQL	mg/Kg	
	TIN	J	1.91	10.9	PQL	mg/Kg	
	Zirconium	J	2.16	5.45	PQL	mg/Kg	
SL-308-SA5B-SB-9.0-10.0	BORON	J	2.51	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	101	109	PQL	mg/Kg	
	TIN	J	1.79	10.9	PQL	mg/Kg	
	Zirconium	J	2.30	5.45	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP20-SA5B-QC-012111	ANTIMONY	J	0.0711	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.155	0.454	PQL	mg/Kg	
	SILVER	J	0.0524	0.113	PQL	mg/Kg	
SL-253-SA5B-SB-3.0-4.0	ANTIMONY	J	0.0924	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.449	PQL	mg/Kg	
	SILVER	J	0.0562	0.112	PQL	mg/Kg	
SL-254-SA5B-SB-3.5-4.5	ANTIMONY	J	0.0746	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0618	0.438	PQL	mg/Kg	
	SILVER	J	0.0303	0.110	PQL	mg/Kg	
SL-307-SA5B-SB-14.0-15.0	ANTIMONY	J	0.0788	0.242	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.126	0.485	PQL	mg/Kg	
	SILVER	J	0.0449	0.121	PQL	mg/Kg	
SL-307-SA5B-SB-4.0-5.0	SELENIUM	J	0.127	0.439	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0356	0.110	PQL	mg/Kg	
SL-307-SA5B-SB-9.0-10.0	ANTIMONY	J	0.0946	0.242	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0891	0.483	PQL	mg/Kg	
	SILVER	J	0.0581	0.121	PQL	mg/Kg	
SL-308-SA5B-SB-14.0-15	ANTIMONY	J	0.0878	0.221	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0662	0.110	PQL	mg/Kg	
	SELENIUM	J	0.136	0.442	PQL	mg/Kg	
	SILVER	J	0.0249	0.110	PQL	mg/Kg	
SL-308-SA5B-SB-4.0-5.0	CADMIUM	J	0.0821	0.108	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.432	PQL	mg/Kg	
	SILVER	J	0.0281	0.108	PQL	mg/Kg	
SL-308-SA5B-SB-9.0-10.0	SELENIUM	J	0.105	0.420	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0309	0.105	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP20-SA5B-QC-012111	HEXAVALENT CHROMIUM	J	0.34	1.2	PQL	mg/Kg	J (all detects)
SL-253-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.41	1.2	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-14.0-15.0	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-14.0-15	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-254-SA5B-SB-3.5-4.5	MERCURY	J	0.0043	0.108	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-14.0-15.0	MERCURY	J	0.0180	0.117	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-4.0-5.0	MERCURY	J	0.0623	0.104	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-9.0-10.0	MERCURY	J	0.0112	0.118	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-307-SA5B-SB-14.0-15.0	METHANOL	J	550	610	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-307-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	0.50	1.3	PQL	mg/Kg	J (all detects)
SL-307-SA5B-SB-9.0-10.0	EFH (C30-C40)	J	1.1	1.4	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-14.0-15	GASOLINE RANGE ORGANICS (C5-C12)	J	0.2	1.1	PQL	mg/Kg	J (all detects)
SL-308-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.52	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-308-SA5B-SB-14.0-15	AROCLOR 1260	J	0.79	1.9	PQL	ug/Kg	J (all detects)
SL-308-SA5B-SB-9.0-10.0	AROCLOR 1254	J	0.67	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP20-SA5B-QC-012111	METHYLENE CHLORIDE	J	0.41	4.0	PQL	ug/Kg	J (all detects)
SL-253-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.39	3.8	PQL	ug/Kg	J (all detects)
SL-254-SA5B-SB-3.5-4.5	METHYLENE CHLORIDE	J	0.45	4.3	PQL	ug/Kg	J (all detects)
SL-307-SA5B-SB-14.0-15.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	2.0 0.42	7.8 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-307-SA5B-SB-4.0-5.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	2.5 0.40	8.3 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-307-SA5B-SB-9.0-10.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	4.2 0.60	8.5 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-308-SA5B-SB-14.0-15	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	5.1 0.41	8.2 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-308-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.48 0.08	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-308-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	0.49 0.09	3.8 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-308-SA5B-SB-14.0-15	1,4-DIOXANE	J	9.0	15	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-307-SA5B-SB-14.0-15.0	CHRYSENE	J	0.62	2.0	PQL	ug/Kg	J (all detects)
SL-307-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	22	PQL	ug/Kg	J (all detects)
SL-308-SA5B-SB-14.0-15	PHENANTHRENE	J	0.93	1.8	PQL	ug/Kg	J (all detects)
SL-308-SA5B-SB-4.0-5.0	CHRYSENE	J	0.66	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE066 **Laboratory: LL**

EDD Filename: DE066_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-308-SA5B-SB-9.0-10.0	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.6	1.8	PQL	ug/Kg	
	PYRENE	J	0.91	1.8	PQL	ug/Kg	

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	January 21, 2011
LDC Report Date:	July 8, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
TB-012111
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0MSD

Introduction

This data review covers 11 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 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.

N Presumptive evidence of presence of the constituent.

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
1/24/11	Chlorotrifluoroethene	27	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD VBLKB55	J (all detects) UJ (all non-detects)	A

Date	Compound	%D	Associated Samples	Flag	A or P
1/25/11 (bj25c01)	4-Methyl-2-pentanone 2-Hexanone	29 35	SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 VBLKB56	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
1/25/11 (bj25c02)	Chlorotrifluoroethene	32	SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 VBLKB56	J (all detects) UJ (all non-detects)	A
1/28/11	Dichlorodifluoromethane Chloromethane	58 34	TB-012111 VBLKY90	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
11/23/10	2-Hexanone	28	All soil samples in SDG DE066	J (all detects) UJ (all non-detects)	A

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
VBLKB55	1/24/11	Methylene chloride Toluene	0.50 ug/Kg 0.25 ug/Kg	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0
VBLKB56	1/25/11	Methylene chloride 2-Butanone Toluene	2.0 ug/Kg 5.1 ug/Kg 0.29 ug/Kg	SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0

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-308-SA5B-SB-4.0-5.0	Methylene chloride Toluene	0.48 ug/Kg 0.08 ug/Kg	3.8U ug/Kg 3.8U ug/Kg
SL-308-SA5B-SB-9.0-10.0	Methylene chloride Toluene	0.49 ug/Kg 0.09 ug/Kg	3.8U ug/Kg 3.8U ug/Kg
SL-308-SA5B-SB-14.0-15.0	Methylene chloride	0.41 ug/Kg	4.1U ug/Kg
SL-253-SA5B-SB-3.0-4.0	Methylene chloride	0.39 ug/Kg	3.8U ug/Kg
SL-254-SA5B-SB-3.5-4.5	Methylene chloride	0.45 ug/Kg	4.3U ug/Kg
DUP20-SA5B-QC-012111	Methylene chloride	0.41 ug/Kg	4.0U ug/Kg
SL-307-SA5B-SB-4.0-5.0	Methylene chloride	0.40 ug/Kg	4.1U ug/Kg
SL-307-SA5B-SB-9.0-10.0	Methylene chloride 2-Butanone	0.60 ug/Kg 4.2 ug/Kg	4.2U ug/Kg 8.5U ug/Kg
SL-307-SA5B-SB-14.0-15.0	Methylene chloride 2-Butanone	0.42 ug/Kg 2.0 ug/Kg	3.9U ug/Kg 7.8U ug/Kg

Sample TB-012111 was identified as a trip blank. No volatile contaminants were found in this blank.

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-253-SA5B-SB-3.0-4.0MS/MSD (SL-253-SA5B-SB-3.0-4.0)	Chlorotrifluoroethene	173 (70-130)	163 (70-130)	-	J (all detects)	A
	Acetone	-	-	43 (≤30)	J (all detects)	
	2-Butanone	-	-	33 (≤30)	J (all detects)	
	1,2,4-Trichlorobenzene	-	-	33 (≤30)	J (all detects)	
	1,2,3-Trichlorobenzene	-	-	38 (≤30)	J (all detects)	

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
LCSB55 (SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 VBLKB55)	Chlorotrifluroroethene	158 (22-131)	-	-	J (all detects)	P
LCSB56 (SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 VBLKB56)	Chlorotrifluoroethene	152 (22-131)	-	-	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 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 DE066	All compounds reported below the RL.	J (all detects)	A

XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE066	SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE066	TB-012111	Dichlorodifluoromethane Chloromethane	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE066	SL-253-SA5B-SB-3.0-4.0	Chlorotrifluoroethene	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE066	SL-253-SA5B-SB-3.0-4.0	Acetone 2-Butanone 1,2,4-Trichlorobenzene 1,2,3-Trichlorobenzene	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Chlorotrifluroroethene	J (all detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 TB-012111	All TCL compounds	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE066

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE066	SL-308-SA5B-SB-4.0-5.0	Methylene chloride Toluene	3.8U ug/Kg 3.8U ug/Kg	A	B
DE066	SL-308-SA5B-SB-9.0-10.0	Methylene chloride Toluene	3.8U ug/Kg 3.8U ug/Kg	A	B
DE066	SL-308-SA5B-SB-14.0-15.0	Methylene chloride	4.1U ug/Kg	A	B
DE066	SL-253-SA5B-SB-3.0-4.0	Methylene chloride	3.8U ug/Kg	A	B
DE066	SL-254-SA5B-SB-3.5-4.5	Methylene chloride	4.3U ug/Kg	A	B
DE066	DUP20-SA5B-QC-012111	Methylene chloride	4.0U ug/Kg	A	B
DE066	SL-307-SA5B-SB-4.0-5.0	Methylene chloride	4.1U ug/Kg	A	B
DE066	SL-307-SA5B-SB-9.0-10.0	Methylene chloride 2-Butanone	4.2U ug/Kg 8.5U ug/Kg	A	B
DE066	SL-307-SA5B-SB-14.0-15.0	Methylene chloride 2-Butanone	3.9U ug/Kg 7.8U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q1a **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JW
2nd Reviewer: A

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: 1/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30% rr
IV.	Continuing calibration/ICV	SW	CCV/CV ≤ 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/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	SW	D = 4, 6
XVII.	Field blanks	ND	TB = 10

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-308-SA5B-SB-4.0-5.0 S	11	SL-253-SA5B-SB-3.0-4.0MS S	21	VBLK Y90	31	
2	SL-308-SA5B-SB-9.0-10.0	12	SL-253-SA5B-SB-3.0-4.0MSD	22	VBLK B55	32	
3	SL-308-SA5B-SB-14.0-15.0	13		23	VBLK B56	33	
4	SL-253-SA5B-SB-3.0-4.0 D	14		24		34	
5	SL-254-SA5B-SB-3.5-4.5	15		25		35	
6	DUP20-SA5B-QC-012111 D	16		26		36	
7	SL-307-SA5B-SB-4.0-5.0	17		27		37	
8	SL-307-SA5B-SB-9.0-10.0	18		28		38	
9	SL-307-SA5B-SB-14.0-15.0	19		29		39	
10	TB-012111 N	20		30		40	

LDC #: 25750 Q 16

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: [illegible]

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	lll. 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. Chlorotrifluoroethene
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 #: 25750Q1C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: JM
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	11/23/10	bn23cv3 (ICV)	Z	28		All soils, VBLKB55, VBLKB56	J/UJ/A (C)
	1/24/11	bj24c02 (CCV)	NNNN	27		1-7, 11, 12, VBLKB55	
	1/25/11	bj25c01 (CCV)	Y Z	29 35		8, 9, VBLKB56	
	1/25/11	bj25c02 (CCV)	NNNN	32			
	1/28/11	yj28c01 (CCV)	JJ A	58 34		10, VBLKY90	

LDC #: 25750 Q1C

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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.

Blank analysis date: 1/24/11
Conc. units: ug/kg
Associated Samples: 1-7
Code : B

Compound		Blank ID	Sample Identification								
		VBLKB55	1	2	3	4	5	6	7		
Methylene chloride	E	0.50	0.48/3.8U	0.49/3.8U	0.41/4.1U	0.39/3.8U	0.45/4.3U	0.41/4.0U	0.40/4.1U		
~~Acetone~~	CC	0.25	0.08/↓	0.09/↓							
CRQL											

Blank analysis date: 1/25/11
Conc. units: ug/kg
Associated Samples: 8-9
Code : B

Compound		Blank ID	Sample Identification								
		VBLKB56	8	9							
Methylene chloride	E	2.0	0.60/4.2U	0.42/3.9U							
~~Acetone~~	M	5.1	4.2/8.5U	2.0/7.8U							
	CC	0.29									
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 #: 25750 Q1C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: SW
2nd Reviewer:

METHOD : GC/MS VOA (EPA SW 846 Method 8260B)

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?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	11/12	NNNN	173 (70-130)	163 (70-130)	( )	4	J acb/A (6)
		#	( )	( )	43 (30)		
		M	( )	( )	33 ( )		
		KKK	( )	( )	33 ( )		
		NNN	( )	( )	38 ( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
H.	1,1-Dichloroethene	59-172%	≤ 22%	61-145%	≤ 14%
S.	Trichloroethene	62-137%	≤ 24%	71-120%	≤ 14%
V.	Benzene	66-142%	≤ 21%	76-127%	≤ 11%
CC.	Toluene	59-139%	≤ 21%	76-125%	≤ 13%
DD.	Chlorobenzene	60-133%	≤ 21%	75-130%	≤ 13%

LDC #: 25750 Q1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: JVG
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS B55	NNNN	158 (22-131)	( )	( )	1-7, VBLKB55	J dets / p (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS B56	NNNN	152 (22-131)	( )	( )	8,9, VBLKB56	J dets / p (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		

LDC#:25750Q1a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: JVP
2nd Reviewer: A

METHOD: GC MS Volatiles (EPA SW 846 Method 8260B)

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		(≤50%) RPD	Qualifications (Parent only)
	4	6		
Methylene chloride	0.39	0.41	5	

LDC #: 25750 Q1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

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

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/23/10	Acetone (FBZ)	0.0717	0.0717	0.0723	0.0723	8	8
	HP09953		Toluene (CBZ)	0.7997	0.7997	0.8561	0.8561	9	9
			1,1,2,2-TCA (DCB)	0.7128	0.7128	0.7300	0.7300	8	8

Cis/Cx	Ax	Ais
50/100	207734	1448770
50/50	825663	1032447
50/50	408310	572795

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0811	1.0037	0.8383
10	0.0760	0.8695	0.7400
20	0.0660	0.8578	0.7113
50	0.0717	0.7997	0.7128
100	0.0721	0.7955	0.6946
300	0.0671	0.8105	0.6830
S =	0.0723	0.8561	0.7300
X =	0.0056	0.0786	0.0565

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 #: 25750 Q1A

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

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

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	01/05/11	Acetone (FBZ)	0.0398	0.0398	0.0439	0.0439	10	10
	HP09355		Toluene (CBZ)	0.9057	0.9057	0.9062	0.9062	3	3
			1,1,2,2-TCA (DCB)	0.8324	0.8324	0.8151	0.8151	4	4

Cis/Cx	Ax	Ais
50/100	99822	1254664
50/50	861713	951409
50/50	491174	590092

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0456	0.8936	0.7696
10	0.0494	0.8678	0.8372
20	0.0475	0.9474	0.8582
50	0.0398	0.9057	0.8324
100	0.0400	0.8833	0.7982
300	0.0408	0.9395	0.7948
S =	0.0439	0.9062	0.8151
X =	0.0042	0.0315	0.0329

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 # 25750 Q1w

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	(IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	yj28c01	1/28/2011	Acetone	(FBZ)	0.0439	0.0456	0.0456	4	4
	HP09355		Toluene	(CBZ)	0.9062	0.8921	0.8921	2	2
			1,1,2,2-TCA	(DCB)	0.8151	0.8374	0.8374	3	3

CCV1

Cis/Cx	Compound		Ax	Ais
50/100	Acetone	(FBZ)	110502	1210798
50/50	Toluene	(CBZ)	831291	931845
50/50	1,1,2,2-TCA	(DCB)	490724	586026

LDC # 45150Q1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	(IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	bj24c03	1/24/2011	Acetone	(FBZ)	0.0723	0.0614	0.0614	15	15
	HP09953		Toluene	(CBZ)	0.8561	0.8704	0.8704	2	2
			1,1,2,2-TCA	(DCB)	0.7300	0.6363	0.6363	13	13
2	bj25c01	1/25/2011	Acetone	(FBZ)	0.0723	0.0703	0.0703	3	3
	HP09953		Toluene	(CBZ)	0.8561	0.8826	0.8826	3	3
			1,1,2,2-TCA	(DCB)	0.7300	0.6555	0.6555	10	10

			CCV1		CCV2	
Cis/Cx	Compound		Response cpd	Response IS	Response cpd	Response IS
50/100	Acetone	(FBZ)	139257	1134170	141056	1003235
50/50	Toluene	(CBZ)	713873	820145	655427	742580
50/50	1,1,2,2-TCA	(DCB)	311931	490188	307916	469724

LDC #: 25750 Q1C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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
Toluene-d8	50	47.33 ✓	95	95	0
Bromofluorobenzene		39.869	80	80	
1,2-Dichloroethane-d4		55.276	111	111	
Dibromofluoromethane	↓	58.41 ✓	117	117	↓

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25750Q1a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JV6
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: 11/12✓

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	16.75	18.80	0	18.35	20.31	110	110	108	108	10	10
Trichloroethene	↓	↓	↓	16.11	18.70	96	96	100	100	15	15
Benzene				16.64	18.93	99	99	101	101	13	13
Toluene				15.40	18.03	92	92	96	96	16	14
Chlorobenzene	↓	↓	✓	14.72	17.35	88	88	92	92✓	16	16

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 #: 25750Q1q

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JV6
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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 = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D-W

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,1-Dichloroethene	20	20	20.64	20.00	103	103	100	100	3	3
Trichloroethene			20.57	19.77	103	103	99	99	4	4
Benzene			19.95	19.48	100	100	97	97	2	2
Toluene			19.91	19.85	100	100	99	99	0	0
Chlorobenzene			19.80	19.79	99	99	99	99	0	0

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 #: 25750 Q1C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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. = $\frac{(79Y)(50)(5ml)}{(574364)(0.856)(6.03g)(0.85\%)}$

= 0.075

≈ 0.08 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: January 21, 2011

LDC Report Date: July 8, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
TB-012111
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0MSD

Introduction

This data review covers 11 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 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.

N Presumptive evidence of presence of the constituent.

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-012111 was identified as a trip blank. No 1,4-dioxane was found in this blank.

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 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 DE066	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-253-SA5B-SB-3.0-4.0 and DUP20-SA5B-QC-012111 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 DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 TB-012111	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q1b **VALIDATION COMPLETENESS WORKSHEET** Date: 7/06/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JG
2nd Reviewer: A

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: 1/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS/LCSD
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 4, 6
XVII.	Field blanks	ND	TB = 10

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-308-SA5B-SB-4.0-5.0 S	11	SL-253-SA5B-SB-3.0-4.0MS S	21	VBLK E06	31	
2	SL-308-SA5B-SB-9.0-10.0	12	SL-253-SA5B-SB-3.0-4.0MSD	22	VBLK E05	32	
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	SL-253-SA5B-SB-3.0-4.0 D	14		24		34	
5	SL-254-SA5B-SB-3.5-4.5	15		25		35	
6	DUP20-SA5B-QC-012111 D	16		26		36	
7	SL-307-SA5B-SB-4.0-5.0	17		27		37	
8	SL-307-SA5B-SB-9.0-10.0	18		28		38	
9	SL-307-SA5B-SB-14.0-15.0	19		29		39	
10	TB-012111 W	20		30		40	

LDC #: 25750 Q16

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
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 > 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?	✓			

LDC #: 25750 Q16

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
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.		✓		

LDC # 25750 Q16

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/1/2010	1,4-Dioxane (1,4-D-d8)	1.3193	1.3359	1.3219	1.3219	1	1
	HP15648								

Cis/Cx	Ax	Ax
10/10	29359	21977

Conc	RRF
0.5	1.3291
2.0	1.3004
5.0	1.3359
10.0	1.3193
25.0	1.3248
X =	1.3219
S =	0.0135

LDC # 25750Q1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/2011	1,4-Dioxane (1,4-D-d8)	1.3392	1.3392	1.3396	1.3396	2	2
	HP15648								

Cis/Cx	Ax	Ax
10/10	25596	19113

Conc	RRF
0.5	1.3082
2.0	1.3793
5.0	1.3539
10.0	1.3392
25.0	1.3175
X =	1.3396
S =	0.0285

LDC # 25150 R1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ej26c01	1/26/2011	1,4-Dioxane (1,4-D-d8)	1.3396	1.3491	1.3491	1	1
	HP15648							
2	ej25c01	1/25/2011	1,4-Dioxane (1,4-D-d8)	1.3219	1.3980	1.3980	6	6
	HP15648							

	Compound (IS)	Cis/Cx	Ais	Ais
CCV1	1,4-Dioxane (1,4-D-d8)	10/10	34460	25543
CCV2	1,4-Dioxane (1,4-D-d8)	10/10	20605	14739

LDC #: 25750 Q1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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
Toluene-d8	10	9.813	98	98	0
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25750 Q1b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: A

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: 11/12

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
1,4-Dioxane	113	132	0	99.19	113.37	88	88	86	86	13	13
~~1,1-Dichloroethene~~											
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 #: 25750 Q 1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JV6
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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 = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: WCS/b W (E05)

Compound	Spike Added (ug/L)		Spiked Sample Concentration (ug/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
1,4-Dioxane	5	5	5.1 ✓	5.45 ✓	102 ✓	104 ✓	104	109	6	6
~~1,1-Dichloroethene~~										
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 #: 25750 Q1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JV6
2nd reviewer: [signature]

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. 3, 1,4-Dioxane

Conc. = $\frac{(844)(10)(\quad)(\quad)}{(16985)(1.3396)(\quad)(\quad)}$

= 0.371

final conc. = $\frac{(0.371)(5ml)(5000uL)}{(5.69g)(200uL)(0.906)} = 8.99$ ≈ 9.0 ug/L

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	January 21, 2011
LDC Report Date:	July 8, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0MSD

Introduction

This data review covers 11 soil 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.

N Presumptive evidence of presence of the constituent.

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.

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.

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-253-SA5B-SB-3.0-4.0MS/MSD (SL-253-SA5B-SB-3.0-4.0)	Benzidine	26 (35-141)	17 (35-141)	39 (≤30)	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 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 DE066	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-253-SA5B-SB-3.0-4.0 and DUP20-SA5B-QC-012111 were identified as field duplicates. No semivolatiles were detected in any of the samples.

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-253-SA5B-SB-3.0-4.0	Benzidine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q2a

VALIDATION COMPLETENESS WORKSHEET

SDG #: DE066

Level IV

Laboratory: Lancaster Laboratories

Date: 7/06/11

Page: 1 of 1

Reviewer: JW6

2nd Reviewer:

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: 1/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
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/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 4, 6
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-308-SA5B-SB-4.0-5.0	11	SL-253-SA5B-SB-3.0-4.0MSD	21	SBLK LE0255	31	
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	SL-253-SA5B-SB-3.0-4.0 D	14		24		34	
5	SL-254-SA5B-SB-3.5-4.5	15		25		35	
6	DUP20-SA5B-QC-012111 D	16		26		36	
7	SL-307-SA5B-SB-4.0-5.0	17		27		37	
8	SL-307-SA5B-SB-9.0-10.0	18		28		38	
9	SL-307-SA5B-SB-14.0-15.0	19		29		39	
10	SL-253-SA5B-SB-3.0-4.0MS	20		30		40	

LDC #: 25750 Q 2c

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
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% 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. Surrogate spikes				
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?	✓			

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/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.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 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.
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.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25750 Q 2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: OVC
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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
		10/11	SSS	26 (35-141)	17 (35-141)	39 (30)	4	J/UJ/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 25750Q2G

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

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 (IS)	Reported RRF (RRF 40 std)	Recalculated RRF (RRF 40 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	01/11/11	Phenol (IS1)	2.617	2.617	2.531	2.531	3	3
			2,4-Dichlorophenol (IS2)	0.328	0.328	0.320	0.320	5	5
	HPSV1		2,4,5-Trichlorophenol (IS3)	0.376	0.376	0.375	0.375	4	4
			Pentachlorophenol (IS4)	0.101	0.101	0.096	0.096	14	14
			Benzidine (IS5)	see r2 calc					

Conc IS/Cpd	Area cpd	Area IS
40/50	651724	199241
40/50	345588	843345
40/50	268172	571196
40/50	119413	945728
40/50	2563483	963381

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Benzidine
5	2.416	0.295	0.371	0.077	r2
15	2.533	0.312	0.351	0.087	
30	2.511	0.320	0.382	0.093	
50	2.617	0.328	0.376	0.101	
80	2.550	0.339	0.389	0.109	
120	2.556	0.327	0.382	0.111	
X =	2.531	0.320	0.375	0.096	#DIV/0!
S =	0.066	0.015	0.013	0.013	#DIV/0!

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 # 25750 Q2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: SM
2nd Reviewer: A

METHOD: EPA SW 846 Method 8270C

Parameter: Benzidine

Order of regression: Linear

Date	Instrument	Compound	Points	y area ratio	x conc ratio	RF
4-Feb-11	LCMS A5	Benzidine	Point 1	0.167155	0.38	0.4457
			Point 2	0.717290	1.13	0.6376
			Point 3	1.545797	2.25	0.6870
			Point 4	2.660923	3.75	0.7096
			Point 5	4.389319	6.00	0.7316
			Point 6	6.551485	9.00	0.7279
						0.6566

Regression Output: Regression Output:		Reported WLR	
Constant	-0.11499	c =	0.15507
Std Err of Y Est	0.04		
R Squared	0.99990	r^2 =	0.999904
No. of Observations	6.00		
Degrees of Freedom	4.00		
		m =	0.7433
X Coefficient(s)	0.74320		
Std Err of Coef.	0.01		

LDC # 95750Q2a

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS SVOA (EPA SW 846 Method 8270D)

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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ea1311	01/28/11	Phenol (IS1)	2.531	2.656	2.656	5	5
			2,4-Dichlorophenol (IS2)	0.320	0.330	0.330	3	3
	HP09572		2,4,5-Trichlorophenol (IS3)	0.375	0.389	0.389	4	4
			Pentachlorophenol (IS4)	0.096	0.093	0.093	1	4
			Benzidine (IS5)	240.00	251.340	251.329	5	5

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/80	836229	157397
2,4-Dichlorophenol (IS2)	40/80	461262	699602
2,4,5-Trichlorophenol (IS3)	40/80	365693	470642
Pentachlorophenol (IS4)	40/80	151339	815976
Benzidine (IS5)	40/250	3808217	836042

Conc =((response ratio/m)+c)*40

		Response ratio	c	m	conc
CCV1	Benzidine	4.55505465	0.15507	0.7433	251.3288

LDC #: 25750 Q2c

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JV
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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	85.3	85	85	0
2-Fluorobiphenyl		88.1	88	88	
Terphenyl-d14		88.51	89	89	
Phenol-d5	200	170.05	85	85	
2-Fluorophenol		172.33	86	86	
2,4,6-Tribromophenol		177.63	89	89	
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 #: 25750 Q 2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JMe
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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: 10 /11

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	1666.67	1666.67	0	1565.3	1492.13	94	94	90	90	5	5
N-Nitroso-di-n-propylamine				1492.87	1464.28	90	90	88	88	Y	Y
4-Chloro-3-methylphenol				1585.3 Y	1490.47 Y	95	95	89	89	6	6
~~Acenaphthene~~											
Pentachlorophenol				1072.37	1069.84	64	64	64	64	0	0
~~Pyrene~~											

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 #: 25 750 Q 2a

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: DR
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 LE025

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	1666.67	NA	1574.65	NA	94	94				
N-Nitroso-di-n-propylamine			1523.46		91	91				
4-Chloro-3-methylphenol			1589.74		95	95				
~~Acenaphthene~~										
Pentachlorophenol			1125.14		68	68				
~~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 #: 25750 Q2c

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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. _____ , MD

Conc. = ( )( )( )( )( ) / ( )( )( )( )( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: January 21, 2011

LDC Report Date: July 8, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0MSD

Introduction

This data review covers 11 soil samples 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.

N Presumptive evidence of presence of the constituent.

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 semivolatile contaminants were 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.

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 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 CRQLs

All compound quantitation and CRQLs were within validation criteria with the following exceptions:

Sample	Compound	Finding	Flag	A or P
SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0	Benzo(b)fluoranthene Benzo(k)fluoranthene	Due to lack of resolution between these compounds in the samples, the laboratory performed the quantitation using the total peak area.	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE066	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-253-SA5B-SB-3.0-4.0 and DUP20-SA5B-QC-012111 were identified as field duplicates. No semivolatiles were detected in any of the samples.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0	Benzo(b)fluoranthene Benzo(k)fluoranthene	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	P	Compound quantitation and CRQLs (peak resolution) (*XII)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All TCL compounds	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q2b **VALIDATION COMPLETENESS WORKSHEET** Date: 7/06/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SW
2nd Reviewer: A

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ SVOA (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: 1/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
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/CRQLs	SW	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	ND	D = 4, 6
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-308-SA5B-SB-4.0-5.0	11	SL-253-SA5B-SB-3.0-4.0MSD	21	SBLKLF0259	31	
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	SL-253-SA5B-SB-3.0-4.0 D	14		24		34	
5	SL-254-SA5B-SB-3.5-4.5	15		25		35	
6	DUP20-SA5B-QC-012111 D	16		26		36	
7	SL-307-SA5B-SB-4.0-5.0	17		27		37	
8	SL-307-SA5B-SB-9.0-10.0	18		28		38	
9	SL-307-SA5B-SB-14.0-15.0	19		29		39	
10	SL-253-SA5B-SB-3.0-4.0MS	20		30		40	

LDC #: 25750 Q2b

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
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 $\geq$ 0.990?			✓	
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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 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 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 #: 25750 Q 26

VALIDATION FINDINGS CHECKLIST

Reviewer: JV
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/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.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 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.
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.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25750 Q 25

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: MG
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 Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?

Y N N/A Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?

#	Date	Sample ID	Finding	Associated Samples	Qualifications
		1, 2	GGG, HHH peaks unresolved		J/UJ/# (**)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 24750 Q26

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

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 (IS)		Reported RRF (RRF 1.0 std)	Recalculated RRF (RRF 1.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	01/25/11	NDMA	(IS1)	1.141	1.141	1.201	1.201	7	7
			Naphthalene	(IS2)	1.062	1.062	1.113	1.113	8	8
	HP10976		Diethylphthalate	(IS3)	1.390	1.390	1.423	1.423	5	5
			Phenanthrene	(IS4)	1.113	1.113	1.169	1.169	8	8
			Chrysene	(IS5)	1.115	1.115	1.154	1.154	8	8
			Benzo(a)pyrene	(IS6)	1.075	1.075	1.128	1.124	10	10

Cis/Cx	Ax	Ais
1/1	70542	61830
1/1	252231	237609
1/1	203007	146026
1/1	266278	239348
1/1	281033	251949
1/1	244998	227912

Conc	NDMA	Naphthalene	Diethylphthalate	Phenanthrene	Chrysene	benzo(a)py
0.05	1.166	1.070	1.358	1.105	1.128	0.984
0.2	1.363	1.285	1.511	1.320	1.334	1.223
0.5	1.162	1.044	1.491	1.080	1.078	1.018
1	1.141	1.062	1.390	1.113	1.115	1.075
5	1.137	1.090	1.364	1.165	1.104	1.262
10	1.237	1.127	1.422	1.232	1.163	1.182
X =	1.2010	1.113	1.423	1.169	1.154	1.124
S =	0.087	0.089	0.065	0.092	0.093	0.114

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 # 35750 Q25

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ib0021	02/01/11	NDMA (IS1)	1.201	1.164	1.164	3	3
			Naphthalene (IS2)	1.113	1.056	1.056	5	5
	HP10976		Diethylphthalate (IS3)	1.423	1.577	1.577	11	11
			Phenanthrene (IS4)	1.169	1.118	1.118	4	4
			Chrysene (IS5)	1.154	1.080	1.080	6	6
			Benzo(a)pyrene (IS6)	1.124	1.064	1.064	5	5

CV1		CCV1	
Cis/Cx	Compound (IS)	Ax	Ais
1/1	NDMA (IS1)	107125	92029
1/1	Naphthalene (IS2)	417313	395214
1/1	Diethylphthalate (IS3)	385237	244234
1/1	Phenanthrene (IS4)	469608	420029
1/1	Chrysene (IS5)	535229	495407
1/1	Benzo(a)pyrene (IS6)	475198	446665

LDC #: 25750 Q2b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JNB
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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	1.00	1.053	105	105	0
2-Fluorobiphenyl		0.817	82	82	
Terphenyl-d14		0.901	90	90	
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 #: 25750 G 26

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 / 11

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	33.33	33.33	0	31.27	31.47	94	94	94	94	1	1
Pentachlorophenol			↓								
Pyrene	33.33	33.33		30.24	31.24	91	91	94	94	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 #: 25750Q2b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: SR
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS 025 LF

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	33.33	NA	31.76	NA	95	95				
Pentachlorophenol										
Pyrene	33.33		31.54		95	95				

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 #: 25750 R 25

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JR
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 , Chrysene

Conc. = $\frac{(8125)(1.00)(1.0\,ml)(1000)(\quad)}{(402364)(1.154)(30\,g)(0.887)(\quad)}$

= 0.66 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:	January 21, 2011
LDC Report Date:	July 8, 2011
Matrix:	Soil/Water
Parameters:	N-Nitrosodimethylamine
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-308-SA5B-SB-4.0-5.0MS
SL-308-SA5B-SB-4.0-5.0MSD

Introduction

This data review covers 9 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.

N Presumptive evidence of presence of the constituent.

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 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% for N-Nitrosodimethylamine.

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 N-Nitrosodimethylamine.

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for N-Nitrosodimethylamine.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No N-nitrosodimethylamine was found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
SBLKWI0251	1/26/11	N-Nitrosodimethylamine	3.39 ng/L	EB25-SA5B-012111

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
EB25-SA5B-012111	N-Nitrosodimethylamine	1.39 ng/L	1.39U ng/L

Sample EB25-SA5B-012111 was identified as an equipment blank. No N-nitrosodimethylamine was found in this blank with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB25-SA5B-012111	1/21/11	N-Nitrosodimethylamine	1.39 ng/L	All soil samples in SDG DE066

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.

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 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 DE066	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE066	EB25-SA5B-012111	N-Nitrosodimethylamine	1.39U ng/L	A	B

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q2c **VALIDATION COMPLETENESS WORKSHEET** Date: 7/06/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SW
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	A	Sampling dates: 1/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV ≤ 20% ICV ≤ 30%
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	LCS 1
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	SW	EB = 4

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-308-SA5B-SB-4.0-5.0 S	11	SBLKLA 0311	21		31	
2	SL-308-SA5B-SB-9.0-10.0	12	SBLK WI0251	22		32	
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	EB25-SA5B-012111 W	14		24		34	
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35	
6	SL-307-SA5B-SB-9.0-10.0	16		26		36	
7	SL-307-SA5B-SB-14.0-15.0	17		27		37	
8	SL-308-SA5B-SB-4.0-5.0 MS			28		38	
9	SL-308-SA5B-SB-4.0-5.0 MSD			29		39	
10		20		30		40	

LDC #: 25750 Q 2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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% 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. Surrogate spikes				
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 #: 25750 Q2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JV6
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/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.	✓			

LDC #: 25750 Q2C

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: JVC
2nd Reviewer: A

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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.

Blank extraction date: 1/26/11 **Blank analysis date:** 1/29/11
Conc. units: ng/L Associated Samples: 4 Code: B

Compound	Blank ID	Sample Identification							
	SBLKW10251	4							
NDMA	3.39		1.39/U						

Blank extraction date: _____ **Blank analysis date:** _____
Conc. units: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification							

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 #: 25750 Q2C

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: NG
2nd Reviewer:

~~NDMA~~ 1625C
METHOD: GC/MS ~~BNA~~ (EP~~A 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?

Blank units: ng/L Associated sample units: ng/kg
Sampling date: 1/21/11
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: All Soils Code: F

Compound	Blank ID	Sample Identification								
	4	1	2	3	6	7				
NDMA	1.39	58.7	31.7	52.9	30.5	157				

5X
.95

Blank units: _____ Associated sample units: _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification								

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 # 25710 QRC

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/29/2011	NDMA (NDMA-d6)	1.0100	1.0099	1.0597	1.0597	7	7
	TE16311								

Cis/Cx	Ax	Ax
25/25	113766	112653

Conc	RRF
1.0	1.100
5.0	1.184
10.0	1.026
25.0	1.010
50.0	1.041
100.0	0.997
X =	1.0597
S =	0.0707

LDC # 25750 Q2c

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	aa349	1/29/2011	NDMA (NDMA-d6)	1.0597	1.0803	1.0803	2	2
	TE16311							
2	ab010e	2/7/2011	NDMA (NDMA-d6)	1.0597	1.3980	1.0075	5	5
	TE16311							
3	ab021	2/7/2011	NDMA (NDMA-d6)	1.0597	1.3980	0.9977	6	6
	TE16311							
4	ab032	2/7/2011	NDMA (NDMA-d6)	1.0597	1.3980	1.0667	1	1
	TE16311							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	NDMA (NDMA-d6)	25/25	97637	90383
CCV2	NDMA (NDMA-d6)	25/25	103980	103207
CCV3	NDMA (NDMA-d6)	25/25	103749	103986
CCV4	NDMA (NDMA-d6)	25/25	125422	117577

LDC #: 25750Q 2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JM
2nd Reviewer: A

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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 = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8/9

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	-------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	833.33	57.79	773.59	804.3	87	87	90	90	4	4
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											

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 #: 25750 Q2C

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JM
2nd Reviewer: A

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C

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 = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS/D 0725W

Compound	Spike Added (ng/L)		Spike Concentration (ng/L)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	25	25	22.92	22.99	92	92	92	92	0	0
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 #: 25750 Q2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JV
2nd reviewer: A

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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 = $\frac{(A_x)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_t)(\%S)}$

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, NDMA

Conc. = $\frac{(4340)(25)(1\ ml)(1000)(\ )}{(96249)(1.059)(30\ g)(0.882)(\ )}$

= 58.7

≈ 59 ng/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: January 21, 2011

LDC Report Date: July 11, 2011

Matrix: Soil

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0MSD

Introduction

This data review covers 11 soil samples 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.

N Presumptive evidence of presence of the constituent.

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 with the following exceptions:

Date	Standard	Column	Compound	%RSD	Associated Samples	Affected Compound	Flag	A or P
1/31/11	ICAL	R2	Aroclor-5442	22	SL-308-SA5B-SB-4.0-5.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0MS SL-253-SA5B-SB-3.0-4.0MSD 110270021A-BLK	Aroclor-5442	J (all detects) UJ (all non-detects)	A

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
2/4/11	3C200338.05R	R2	Aroclor-5460	20.8	SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 110340005A-BLK	Aroclor-5460	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Affected Compound	Flag	A or P
2/4/11	3C20033B.06R	R2	Aroclor-5442	32.9	SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 110340005A-BLK	Aroclor-5442	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.

No field duplicates 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	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-308-SA5B-SB-4.0-5.0	R1	Decachlorobiphenyl	131 (45-120)	All TCL compounds	J (all detects)	P
SL-253-SA5B-SB-3.0-4.0	R1	Decachlorobiphenyl	134 (45-120)	All TCL compounds	J (all detects)	A
SL-254-SA5B-SB-3.5-4.5	R1	Decachlorobiphenyl	142 (45-120)	All TCL compounds	J (all detects)	P
DUP20-SA5B-QC-012111	R1	Decachlorobiphenyl	136 (45-120)	All TCL compounds	J (all detects)	P
SL-307-SA5B-SB-4.0-5.0	R1	Decachlorobiphenyl	133 (45-120)	All TCL compounds	J (all detects)	P
SL-307-SA5B-SB-9.0-10.0	R1	Decachlorobiphenyl	134 (45-120)	All TCL compounds	J (all detects)	P
SL-307-SA5B-SB-14.0-15.0	R1	Decachlorobiphenyl	135 (45-120)	All TCL compounds	J (all detects)	P
110270021A-BLK	R1	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
110340005A-LCS/D (SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 110340005A-BLK)	Aroclor-5442	59 (75-125)	60 (75-125)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

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-308-SA5B-SB-14.0-15.0	Aroclor-1254	43	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE066	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-253-SA5B-SB-3.0-4.0 and DUP20-SA5B-QC-012111 were identified as field duplicates. No polychlorinated biphenyls were detected in any of the samples.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Aroclor-5442	J (all detects) UJ (all non-detects)	A	Initial calibration (%RSD) (C)
DE066	SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0	Aroclor-5460 Aroclor-5442	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE066	SL-253-SA5B-SB-3.0-4.0	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE066	SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE066	SL-308-SA5B-SB-14.0-15.0	Aroclor-1254	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q3b

SDG #: DE066

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-8-11

Page: 1 of 1

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: 1/21/11
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	SW	%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 and reported CRQLs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	ND	FD 2 4+6
XVI.	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: ALL SOIL

1	SL-308-SA5B-SB-4.0-5.0	11	SL-253-SA5B-SB-3.0-4.0MSD	21		31	I102700ZIA-BLK
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	I/03400035A-BLK
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	SL-253-SA5B-SB-3.0-4.0	14		24		34	
5	SL-254-SA5B-SB-3.5-4.5	15		25		35	
6	DUP20-SA5B-QC-012111	16		26		36	
7	SL-307-SA5B-SB-4.0-5.0	17		27		37	
8	SL-307-SA5B-SB-9.0-10.0	18		28		38	
9	SL-307-SA5B-SB-14.0-15.0	19		29		39	
10	SL-253-SA5B-SB-3.0-4.0MS	20		30		40	

Notes:

LDC #: 25750Q3D
SDG #: See Cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: JF
2nd Reviewer: C

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?		✓		
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___%R				
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?			✓	
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?			✓	
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20% or percent recovieries 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?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up 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) of one or more surrogates was 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				

LDC #: 25750Q2b
SDG #: See cover

VALIDATION FINDINGS CHECKLIST

Reviewer: VF
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
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?			✓	
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, dry weight factors, and clean-up activities 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. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 5442
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. ↓ 5460
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. ↓ 5432
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 25750Q3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Page: 1 of 1
Reviewer: KT
2nd Reviewer: A

METHOD: X GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 5 point calibration curve performed?
Y N N/A Was a linear fit used for evaluation? If yes, the acceptance criteria for each compound is %RSD less than or equal to 20.0%.
Y N N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation? _____
Y N N/A Did the initial calibration meet the acceptance criteria?
Y N N/A Was initial calibration performed at the required frequency?

Level IV Only

Y N N/A Were the retention time windows properly established for all compounds?
Y N N/A Were compounds run at the required concentrations in the initial calibrations?

#	Date	Standard ID	Column / Detector	Compound	Finding RSD Limit ≤20%	Associated Samples	Qualifications
	1/21/11	ICAL	R-2	II	2.2	1, 4-11	J/UJ/A (C)
						MI102700ZIA-BLK	
						All	
			R				

Comments _____

INICALNew.wpd

LDC #: 25750236
SDG #: Level C only

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: MP
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?
Y N N/A Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?
Y N N/A Was at least one standard run daily to verify the working curve?
Y N N/A Did the continuing calibration standards meet the percent difference (%D) of ≤20.0%?

Level IV/D Only

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	2/4/11	3C200338.05R	R_2	JJ	20.8	( )	2-3, 1103400054-BLK	J/UJ/A (C)
	2/4/11	3C200338.06R	R_2	II	32.9	( )	↓	J/UJ/A (C)
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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						( )		
						( )		

A. alpha-BHC
B. beta-BHC
C. delta-BHC
D. gamma-BHC
E. Heptachlor
F. Aldrin
G. Heptachlor epoxide
H. Endosulfan I
I Dieldrin
J. 4,4'-DDE
K. Endrin
L Endosulfan II
M. 4,4'-DDD
N. Endosulfan sulfate
O. 4,4'-DDT
P. Methoxychlor
Q. Endrin ketone
R. Endrin aldehyde
S. alpha-Chlordane
T. gamma-Chlordane
U. Toxaphene
V. Aroclor-1016
W Aroclor-1221
X. Aroclor-1232
Y. Aroclor-1242
Z. Aroclor-1248
AA. Aroclor-1254
BB. Aroclor-1260
CC. 2,4'-DDD
DD. 2,4'-DDE
EE. 2,4'-DDT
FF. Hexachlorobenzene
GG Chlordane
HH Chlordane (Technical)

LDC #: 25750Q2b
SDG #: See cover

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: VT
2nd Reviewer: A

METHOD: __ GC EPA 8081/8082 Pesticides/PCB's
Are surrogates required by the method? Yes X 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?

#	Date	Lab ID/Reference	Column	Surrogate Compound	%R (Limits)	Qualifications
		1	RT	B	131 (45-120)	J dets/p (S)
		4	RT	B	134 ( )	~~J/UJ~~ J dets/A
		5	RT	B	142 ( )	J dets/p
		6	RT	B	136 ( )	
		7	RT	B	133 ( )	
		8	RT	B	134 ( )	
		9	RT	B	135 ( )	
		1227002IA-BLK	RT	B	122 ( )	

Letter Designation	Surrogate Compound	Recovery QC Limits (Soil)	Recovery QC Limits (Water)	Comments
A	Tetrachloro-m-xylene			
B	Decachlorobiphenyl			

LDC #: 11034D2B
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: VF
2nd Reviewer: C

METHOD: X 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
	110340005A-LCS/D	IT	59 (75-125)	60 (75-125)	( )	2-3 + 110340005A-BLK	J/UJ/P (LCS) (gml II-KK)
			( )	( )	( )		
			( )	( )	( )		
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LDC #: 25750236

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: MT
2nd Reviewer: C

METHOD: X 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?
Y N N/A Did the percent difference of detected compounds between two columns./detectors ≤40%?
If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD/%D Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	AA	3	43	J dets/A (X XIII)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25750926
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: MA
2nd Reviewer: CA

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (25 std)	Recalculated CF (200 std)	Reported CF (initial)	Recalculated CF (intial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/31/11	BB (R1 Peak1)	13	13	14	14	5.0	5.0
			↓ (R2 Peak1)	33	33	35	35	12.4	12.4
2	ICAL	2/3/11	BB (R1 Peak1)	54	54	56	56	8.2	8.2
			↓ (R2 Peak1)	165	165	168	168	7.8	7.8
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 #: 25750236
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: VF
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount (ng)
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount (ng)

Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported CF/Conc CCV	Recalculated CF/Conc CCV	Reported %D	Recalculated %D
3C20033.09	2/4/11	BB (R_1)	200.00	172.69	172.69	13.7	13.7
		↓ (R_2)	200.00	200.07	200.07	0	0

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 #: 25750Q3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JM
2nd reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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: 3

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene	R4	1.04	0.735339	71	71	0
Tetrachloro-m-xylene						
Decachlorobiphenyl	R1	1.04	0.906962	87	87	0
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 25750Q3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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: 10/11

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.
Gamma-BHC											
4,4'-DDT											
Aroclor 1260	16.67	16.67	ND	21.35	22.52	128	128	135	135	5	5

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 #: 25750026
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: MT
2nd Reviewer: [signature]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1102700214 - LCS

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.
gamma-BHC										
4,4'-DDT										
Aroclor 1260	16.67	n/a	21.70	n/a	130	130				

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 #: 25750Q3b
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: LT
2nd reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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?

Example:

Sample I.D. 3 MB:

Conc. = $\frac{(1427.85)(2mL)\ 1X}{(49)\ (60g)}$

= 0.97 (Peak 4) (+ 0.52 + 0.66) ÷ 3

= BB_{Total} = 0.72

$\frac{0.72}{0.906\ (\%S)}$ = 0.79 ug/kg ✓

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: January 21, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0MSD
SL-253-SA5B-SB-3.0-4.0DUP

Introduction

This data review covers 12 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, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, 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.

N Presumptive evidence of presence of the constituent.

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)	Iron Phosphorus Tin Copper	4.685 mg/Kg 0.964 mg/Kg 1.041 mg/Kg 0.161 mg/Kg	All samples in SDG DE066
ICB/CCB	Antimony Barium Titanium Zirconium	0.44 ug/L 0.10 ug/L 0.94 ug/L 5.1 ug/L	All samples in SDG DE066
ICB/CCB	Iron	79.7 ug/L	SL-254-SA5B-SB-3.5-4.5 SL-307-SA5B-SB-9.0-10.0

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-308-SA5B-SB-4.0-5.0	Tin Zirconium	1.9 mg/Kg 2.2 mg/Kg	1.9U mg/Kg 2.2U mg/Kg
SL-308-SA5B-SB-9.0-10.0	Tin Zirconium	1.8 mg/Kg 2.3 mg/Kg	1.8U mg/Kg 2.3U mg/Kg
SL-308-SA5B-SB-14.0-15.0	Antimony Tin Zirconium	0.088 mg/Kg 2.0 mg/Kg 1.5 mg/Kg	0.088U mg/Kg 2.0U mg/Kg 1.5U mg/Kg
SL-253-SA5B-SB-3.0-4.0	Antimony Tin	0.092 mg/Kg 2.8 mg/Kg	0.092U mg/Kg 2.8U mg/Kg
SL-254-SA5B-SB-3.5-4.5	Antimony Tin Zirconium	0.075 mg/Kg 2.7 mg/Kg 1.4 mg/Kg	0.075U mg/Kg 2.7U mg/Kg 1.4U mg/Kg
DUP20-SA5B-QC-012111	Antimony Tin	0.071 mg/Kg 2.3 mg/Kg	0.071U mg/Kg 2.3U mg/Kg
SL-307-SA5B-SB-4.0-5.0	Tin Zirconium	2.5 mg/Kg 2.1 mg/Kg	2.5U mg/Kg 2.1U mg/Kg
SL-307-SA5B-SB-9.0-10.0	Antimony Tin	0.095 mg/Kg 2.5 mg/Kg	0.095U mg/Kg 2.5U mg/Kg
SL-307-SA5B-SB-14.0-15.0	Antimony Tin	0.079 mg/Kg 2.1 mg/Kg	0.079U mg/Kg 2.1U mg/Kg

No field blanks were identified in this SDG.

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-253-SA5B-SB-3.0-4.0MS/MSD (All samples in SDG DE066)	Antimony	20 (75-125)	23 (75-125)	-	J (all detects) R (all non-detects)	A
SL-253-SA5B-SB-3.0-4.0MS/MSD (All samples in SDG DE066)	Arsenic	170 (75-125)	163 (75-125)	-	J (all detects)	A
SL-253-SA5B-SB-3.0-4.0MS/MSD (All samples in SDG DE066)	Beryllium Chromium Lead Phosphorus Potassium Thallium	74 (75-125) 74 (75-125) 126 (75-125) 69 (75-125) 62 (75-125) 67 (75-125)	72 (75-125) 72 (75-125) 74 (75-125) - 56 (75-125) -	- - - - - -	J (all detects) UJ (all non-detects)	A

VII. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable. Results were within QC limits.

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) 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.

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 DE066	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-253-SA5B-SB-3.0-4.0 and DUP20-SA5B-QC-012111 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-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
Aluminum	27600	26200	5 (≤50)	-	-
Antimony	0.092	0.071	26 (≤50)	-	-
Arsenic	5.5	6.1	10 (≤50)	-	-
Barium	141	160	13 (≤50)	-	-
Beryllium	0.93	0.91	2 (≤50)	-	-
Boron	1.5	1.8	18 (≤50)	-	-
Cadmium	0.15	0.23	42 (≤50)	-	-
Calcium	3320	3110	7 (≤50)	-	-
Chromium	32.4	32.9	2 (≤50)	-	-
Cobalt	7.7	10.8	34 (≤50)	-	-
Copper	14.1	14.1	0 (≤50)	-	-
Iron	27900	29400	5 (≤50)	-	-
Lead	7.4	8.4	13 (≤50)	-	-
Lithium	33.6	30.7	9 (≤50)	-	-
Magnesium	4810	4750	1 (≤50)	-	-
Manganese	406	647	46 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
Molybdenum	0.45	0.53	16 (≤50)	-	-
Nickel	19.3	22.1	14 (≤50)	-	-
Phosphorus	180	217	19 (≤50)	-	-
Potassium	1890	2170	14 (≤50)	-	-
Selenium	0.20	0.15	29 (≤50)	-	-
Silver	0.056	0.052	7 (≤50)	-	-
Sodium	147	136	8 (≤50)	-	-
Strontium	30.6	30.7	0 (≤50)	-	-
Thallium	0.33	0.37	11 (≤50)	-	-
Tin	2.8	2.3	20 (≤50)	-	-
Titanium	1530	1500	2 (≤50)	-	-
Vanadium	58.1	58.9	1 (≤50)	-	-
Zinc	51.8	60.2	22 (≤50)	-	-
Zirconium	3.3	3.2	3 (≤50)	-	-

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE066

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Antimony	J (all detects) R (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Arsenic	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Beryllium Chromium Lead Phosphorus Potassium Thallium	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	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 DE066

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE066	SL-308-SA5B-SB-4.0-5.0	Tin Zirconium	1.9U mg/Kg 2.2U mg/Kg	A	B
DE066	SL-308-SA5B-SB-9.0-10.0	Tin Zirconium	1.8U mg/Kg 2.3U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE066	SL-308-SA5B-SB-14.0-15.0	Antimony Tin Zirconium	0.088U mg/Kg 2.0U mg/Kg 1.5U mg/Kg	A	B
DE066	SL-253-SA5B-SB-3.0-4.0	Antimony Tin	0.092U mg/Kg 2.8U mg/Kg	A	B
DE066	SL-254-SA5B-SB-3.5-4.5	Antimony Tin Zirconium	0.075U mg/Kg 2.7U mg/Kg 1.4U mg/Kg	A	B
DE066	DUP20-SA5B-QC-012111	Antimony Tin	0.071U mg/Kg 2.3U mg/Kg	A	B
DE066	SL-307-SA5B-SB-4.0-5.0	Tin Zirconium	2.5U mg/Kg 2.1U mg/Kg	A	B
DE066	SL-307-SA5B-SB-9.0-10.0	Antimony Tin	0.095U mg/Kg 2.5U mg/Kg	A	B
DE066	SL-307-SA5B-SB-14.0-15.0	Antimony Tin	0.079U mg/Kg 2.1U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE066 Level IV Page: 1 of 2
Laboratory: Lancaster Laboratories Reviewer: CC
2nd Reviewer: W

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	A	Sampling dates: 1/21/11
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	A	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	Not utilized
XI.	ICP Serial Dilution	A	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
XIV.	Field Duplicates	SW	(4,6)
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	SL-308-SA5B-SB-4.0-5.0	11	SL-253-SA5B-SB-3.0-4.0MSD	21	BMS	31	
2	SL-308-SA5B-SB-9.0-10.0	12	SL-253-SA5B-SB-3.0-4.0DUP	22		32	
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	SL-253-SA5B-SB-3.0-4.0	14		24		34	
5	SL-254-SA5B-SB-3.5-4.5	15		25		35	
6	DUP20-SA5B-QC-012111	16		26		36	
7	SL-307-SA5B-SB-4.0-5.0	17		27		37	
8	SL-307-SA5B-SB-9.0-10.0	18		28		38	
9	SL-307-SA5B-SB-14.0-15.0	19		29		39	
10	SL-253-SA5B-SB-3.0-4.0MS	20		30		40	

Notes:

LDC #: 25750Q4

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: CR
2nd Reviewer: W

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 #: 25750Q4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-9		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-10-12		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

LDC #: 25750Q4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: V

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

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	
Sb			0.44	0.44			0.088	0.092	0.075	0.071		0.095	0.079	
Be			0.10	0.10										
Fe	4.685			23.43										
P	0.964			4.82										
Sn	1.041			5.205	1.9	1.8	2.0	2.8	2.7	2.3	2.5	2.5	2.1	
Ti			0.94	0.47										
Zr			5.1	2.55	2.2	2.3	1.5		1.4		2.1			

Cu 0.161

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 5, 8

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers									
Fe			79.7	39.85										

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 #: 25750Q1

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
	1/29/11	ICSA (16:08)	Mn	4	≤0.78	4-9	NoQual (C710x)
	1/29/11	ICSA (17:47)	Mn	4	≤0.78	↓	↓

Comments:

LDC #: 23750Q4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

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 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
	10/11	S	Sb*	20	23		All	J/R/A (Q)
			As	170	163			Jdet/A
			Be	74	72			J/UJ/A
			Cr	74	72			
			Pb	126	74			
			P	69				
			K	62	56			
			Tl	67				

Comments: *Post spike = 68%

LDC#: 25750Q4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

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)	
	4	6		
Aluminum	27600	26200	5	
Antimony	0.092	0.071	26	
Arsenic	5.5	6.1	10	
Barium	141	160	13	
Beryllium	0.93	0.91	2	
Boron	1.5	1.8	18	
Cadmium	0.15	0.23	42	
Calcium	3320	3110	7	
Chromium	32.4	32.9	2	
Cobalt	7.7	10.8	34	
Copper	14.1	14.1	0	
Iron	27900	29400	5	
Lead	7.4	8.4	13	
Lithium	33.6	30.7	9	
Magnesium	4810	4750	1	
Manganese	406	647	46	
Molybdenum	0.45	0.53	16	
Nickel	19.3	22.1	14	
Phosphorus	180	217	19	

LDC#: 25750Q4

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)	
	4	6		
Potassium	1890	2170	14	
Selenium	0.20	0.15	29	
Silver	0.056	0.052	7	
Sodium	147	136	8	
Strontium	30.6	30.7	0	
Thallium	0.33	0.37	11	
Tin	2.8	2.3	20	
Titanium	1530	1500	2	
Vanadium	58.1	58.9	1	
Zinc	51.8	60.2	22	
Zirconium	3.3	3.2	3	

LDC #: 25004

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 x 100 / True

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)	Sr	605.22	600	100.9	100.9	Y
ICV	ICP/MS (Initial calibration)	Sb	50.34	50	100.7	100.7	
ICV	CVAA (Initial calibration)	Hg	2.55	2.5	102.0	102.0	
CCV	ICP (Continuing calibration)	P	503.05	500	100.6	100.6	
CCV	ICP/MS (Continuing calibration)	Tl	26.66	25	106.6	106.6	
CCV	CVAA (Continuing calibration)	Hg	1.02	1	102	102	
	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 #: 28509Q

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: QR
2nd Reviewer:

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	Zn	20.1	20	100.5	100.5	Y
LCS	Laboratory control sample	P	1004.6	1000	100	100	
10	Matrix spike	Cd	(SSR-SR) 0.9332	1.1224	83	83	
12	Duplicate	K	1894.2627	1838.6977	3	3	
4	ICP serial dilution	Ti	13602.68	14336.05	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 #: 25750241

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [signature]

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 IC 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:

$\frac{100mL(16.71308mg/L)}{0.865(1.02)} = 1894 mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	4	Al	27600	27600	Y
		Sb	0.092	0.092	
		As	5.5	5.5	
		Ba	141	141	
		Be	0.93	0.93	
		B	1.5	1.5	
		Cd	0.15	0.15	
		Ca	3320	3320	
		Cr	32.4	32.4	
		Co	7.7	7.7	
		Cu	14.1	14.1	
		Fe	27900	27900	
		Pb	7.4	7.4	
		Li	33.6	336	
		Mg	480	480	
		Mn	406	406	
		Mo	0.45	0.45	
		Ni	19.3	19.3	
		P	180	180	
		K	1890	1890	
		Se	0.20	0.20	
		As	0.056	0.056	
		Na	147	147	
		Sr	30.6	30.6	
		Tl	0.33	0.33	
		Sn	2.8	2.8	
		Ti	1530	1530	
		V	58.1	58.1	
		Zn	51.8	51.8	
		Zr	3.3	3.3	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: January 21, 2011

LDC Report Date: July 12, 2011

Matrix: Soil/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory, Area IV: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-253-SA5B-SB-3.0-4.0
SL-254-SA5B-SB-3.5-4.5
DUP20-SA5B-QC-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-253-SA5B-SB-3.0-4.0MS
SL-253-SA5B-SB-3.0-4.0DUP
SL-308-SA5B-SB-4.0-5.0MS
SL-308-SA5B-SB-4.0-5.0DUP

Introduction

This data review covers 13 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 150.1 and EPA SW 846 Method 9045C for pH, 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 Laboratory, Area IV 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.

N Presumptive evidence of presence of the constituent.

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
EB25-SA5B-012111	pH	81 hours	48 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 EB25-SA5B-012111 was identified as an equipment blank. No contaminant concentrations were found in this blank with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB25-SA5B-012111	1/21/11	pH	6.2 units	No associated samples in this SDG

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-253-SA5B-SB-3.0-4.0MS (All soil samples in SDG DE066)	Fluoride	74 (80-120)	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) and relative percent differences (RPD) 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 DE066	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-253-SA5B-SB-3.0-4.0 and DUP20-SA5B-QC-012111 were identified as field duplicates. No contaminant concentrations were detected in any of the samples with the following exceptions:

Analyte	Concentration		RPD (Limits)	Flags	A or P
	SL-253-SA5B-SB-3.0-4.0	DUP20-SA5B-QC-012111			
Fluoride	1.8 mg/L	1.6 mg/L	12 (≤50)	-	-
pH	6.14 units	6.87 units	11 (≤50)	-	-
Hexavalent chromium	0.41 mg/L	0.34 mg/L	19 (≤50)	-	-

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE066

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	EB25-SA5B-012111	pH	J (all detects) UJ (all non-detects)	P	Technical holding times (H)
DE029	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (Q)
DE029	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-253-SA5B-SB-3.0-4.0 SL-254-SA5B-SB-3.5-4.5 DUP20-SA5B-QC-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	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 DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q6 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/5/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), ~~Oxidation Reduction Potential (ASTM-D1498)~~, pH (EPA Method 150.1/EPA SW846 Method 9045C), Perchlorate (EPA 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	~~A~~SW	Sampling dates: 1/21/11
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/D
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	SW	(5,7)
X.	Field blanks	SW	EB=4

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-308-SA5B-SB-4.0-5.0	11	SL-253-SA5B-SB-3.0-4.0MS	21		31	
2	SL-308-SA5B-SB-9.0-10.0	~~12~~	~~SL-253-SA5B-SB-3.0-4.0MSD~~	22		32	
3	SL-308-SA5B-SB-14.0-15.0	13	SL-253-SA5B-SB-3.0-4.0DUP	23		33	
4	EB25-SA5B-012111	14	(X1) MS	24		34	
5	SL-253-SA5B-SB-3.0-4.0	15	" DUP	25		35	
6	SL-254-SA5B-SB-3.5-4.5	16		26		36	
7	DUP20-SA5B-QC-012111	17		27		37	
8	SL-307-SA5B-SB-4.0-5.0	18		28		38	
9	SL-307-SA5B-SB-9.0-10.0	19		29		39	
10	SL-307-SA5B-SB-14.0-15.0	20		30		40	

Notes:

LDC #: 25750Q6

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: QC
2nd Reviewer: [illegible]

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 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% (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?			✓	

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.	✓			

LDC #: 25750Q6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: CC
2nd reviewer: [illegible]

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-3&10		(pH) TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC (CR6+) (ClO4)
4		(pH) TDS Cl F (NO3) NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC CR6+ ClO4
5-7		(pH) TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
QC: 11		pH TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
~~12~~		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
13		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC (CR6+) (ClO4)
14		pH TDS Cl F NO3 NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC CR6+ ClO4
15		pH TDS Cl F NO3 NO2 SO4 PO4 ALK (CN-) NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN- NH3 TKN TOC CR6+ ClO4

Comments: _____

LDC #: 25750Q6

VALIDATION FINDINGS WORKSHEET
Technical Holding Times

Page: 1 of 1
Reviewer: CR
2nd reviewer: CA

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:	150.1					
Parameters:	pH					
Technical holding time:	48hrs					

Sample ID	Sampling date	Analysis date	Analysis date	Analysis date	Analysis date	Analysis date	Qualifier
4	1/24/11 12:30	1/24/11 21:30	(8hrs)				J/UJ/P cH

LDC #: 25750Q6

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: SR
2nd Reviewer: VK

METHOD: Inorganics, EPA Method See Cover
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target analytes detected in the field blanks?
Blank units: pH units **Associated sample units:** NA
Sampling date: 1/21/11 Soil factor applied NA
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: None

Analyte	Blank ID	Action Limit	Sample Identification							
	4									
pH	6.2									

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 #: 25750Q6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: QR
2nd Reviewer: 2

METHOD: Inorganics, Method Soil

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 (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
		11	S	F	74 (80-120)	All Soil	J/UJ/A (Q)

Comments:

LDC# 25750Q6

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
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)	
	5	7		
Fluoride	1.8	1.6	12	
pH (units)	6.14	6.87	11	
Hexavalent Chromium	0.41	0.34	19	

V:\FIELD DUPLICATES\FD_inorganic\25750Q6.wpd

LDC #: 25750Q6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR
2nd Reviewer: IA

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated. Calibration date: 1/24/11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found X 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution

True = concentration of each analyte in the ICV or CCV source

Type of analysis	Analyte	Standard	Conc. (ug/L)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.002	1.000	0.999	Y
		s2	4.00	0.007			
		s3	10.00	0.023			
		s4	25.00	0.061			
		s5	100.00	0.267			
Calibration verification	CCV	CCV	200	193,494	97	97	
Calibration verification	F	↓	1.5	1.5182	101	101	
Calibration verification	NO3	↓	↓	1.4948	100	100	↓

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 #: 25780Q6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: 1A

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	CN	0.21	0.2	105	-	Y
11	Matrix spike sample	CN	(SSR-SR) 3.84	4.0	92	92	↓
13	Duplicate sample	F	1.5	1.4	7	11	↓

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 #: 25500b

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 F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

$y = 0.3609x - 0.0204$

Recalculation:

$$\frac{\left(\frac{0.056 + 0.0204}{0.3609}\right)(50\,mL)}{0.8826(5.03)} = 2.4\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	F	2.4	2.4	Y
		NO_3	1.9	1.5	
		Cl^-	0.50	0.50	
		pH	7.57	7.57	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: January 21, 2011

LDC Report Date: July 11, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
TB-012111

Introduction

This data review covers 6 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 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.

N Presumptive evidence of presence of the constituent.

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-012111 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample EB25-SA5B-012111 was identified as an equipment blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

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

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.

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 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 DE066	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
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0 TB-012111	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q7 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MF
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: 1/21/11
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	N	Client Specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	MD	TB = 8 EB = 4

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-308-SA5B-SB-4.0-5.0 S	11		21		31	11024A34A-BLK S
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	11027A20A-BLK W
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	EB25-SA5B-012111 W	14		24		34	
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35	
6	SL-307-SA5B-SB-9.0-10.0	16		26		36	
7	SL-307-SA5B-SB-14.0-15.0	17		27		37	
8	TB-012111 W	18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25750Q7

VALIDATION FINDINGS CHECKLIST

Reviewer: VT
2nd Reviewer:

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ~~%D~~ or %R				
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) of one or more surrogates was 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?	✓			
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				

LDC #: 2575007

VALIDATION FINDINGS CHECKLIST

Reviewer: WT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 2575007
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: WA
2nd Reviewer: A

METHOD: GC X 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 (1)0 std)	Recalculated CF (1)0 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/6/10	GRO	7126	7126	8074	8074	5.9	5.9
2	ICAL	4/29/10	GRO	39008	39008	37329	37329	12.7	12.7
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 #: 25750 (24)
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

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	20027.0003	1/27/11	GRO	550.00	540.01	540.01	1.8	1.8
	340248.0002	1/25/11	GRO	220.00	197.40	197.40	~~10.8~~ 10.3	10.3
2	340248.0017	1/25/11	GRO	220.00	182.35	182.35	17.1	17.1
3	340248.0019	1/25/11	GRO	220.00	199.11	199.11	9.5	9.5
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 #: 25750Q7

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: HH
2nd reviewer: C

METHOD: X 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: 3

Surrogate	Detector Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TFT	FID	742.68	571.865	77	77	0

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: ___

LDC #: 25750Q7

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: VT
2nd Reviewer: A

METHOD: X GC __HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1102A34A - LCS/D

Compound	Spike Added (mg/kg)		Spike 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	11	7.7	8.5	70	70	77	77	10	10
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 #: 25750Q7
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: VT
2nd Reviewer: A

METHOD: X 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. 3 Compound Name GRO

Concentration = $\frac{(301712)(24.75\,mL)(1X)}{(373329)(1\,g)(.906)} \div 1000$

= 0.022 mg/kg

#	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:	January 21, 2011
LDC Report Date:	July 11, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0

Introduction

This data review covers 6 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 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.

N Presumptive evidence of presence of the constituent.

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.

Sample EB25-SA5B-012111 was identified as an equipment blank. No total petroleum hydrocarbons as extractable contaminants were found in this blank.

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

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.

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 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 DE066	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
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q8 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-8-11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: lat
2nd Reviewer:

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: 1/21/11
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	N	Client Specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB=4

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-308-SA5B-SB-4.0-5.0 S	11		21		31	1103400024-BLK	S
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	1102400354-BLK	W
3	SL-308-SA5B-SB-14.0-15.0	13		23		33		
4	EB25-SA5B-012111 W	14		24		34		
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35		
6	SL-307-SA5B-SB-9.0-10.0	16		26		36		
7	SL-307-SA5B-SB-14.0-15.0	17		27		37		
8		18		28		38		
9		19		29		39		
10		20		30		40		

Notes:

LDC #: 25750Q8

VALIDATION FINDINGS CHECKLIST

Reviewer: MT
2nd Reviewer: C

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25780Q8

VALIDATION FINDINGS CHECKLIST

Reviewer: MF
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25750Q8
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: KA
2nd Reviewer: A

METHOD: GC X 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	1/27/11	C8-C40	20213	20213	20125	20125	2.1	2.1
	ICAL	2/2/11	C8-C40	15068	15068	15498	15498	4.9	4.9
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 #: 27508

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: WA

2nd Reviewer:

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	J027.40R	1/28/11	C8-C40	575.96	567.32	567.32	1.5	1.5
	T035.09R	2/4/11	C8-C40	239.98	237.73	239.73	0.1	0.1
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 #: 23750Q8

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: KT
2nd reviewer: C

METHOD: X 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: 6

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
o-terphenyl	FID	1.00	0.6169	62	62	0
Chlorobenzene	FID	1.00	0.4952	50	50	0

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Notes: ___

LDC #: 25750Q8

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: KT
2nd Reviewer: A

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1103400024-LCS

Compound	Spike Added (mg/kg)		Spike 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~~ C8-C40 (8015)	0.84	n/a	0.57	n/a	68	68				
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 #: 25750Q8

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: KT
2nd Reviewer: A

METHOD: X GC __ HPLC

X 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. 6 Compound Name C30-C40

Concentration = $\frac{(870679)(1mL)(1X)}{(15498)(60g)(.828)}$

= 1.1 mg/kg

#	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: January 21, 2011

LDC Report Date: July 11, 2011

Matrix: Soil/Water

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-308-SA5B-SB-4.0-5.0MS
SL-308-SA5B-SB-4.0-5.0MSD

Introduction

This data review covers 8 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 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.

N Presumptive evidence of presence of the constituent.

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.

Sample EB25-SA5B-012111 was identified as an equipment blank. No explosive contaminants were found in this blank.

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-308-SA5B-SB-4.0-5.0MS/MSD (SL-308-SA5B-SB-4.0-5.0)	PETN	79 (80-121)	-	-	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) 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 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 DE066	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
Explosives - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0	PETN	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q40 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-8-11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: LT
2nd Reviewer: C

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: 1/21/11
II	Initial calibration	A	%RSD ≤ 20, r²
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/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB=4

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-308-SA5B-SB-4.0-5.0 S	11		21		31	1102900064-BLK S
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	110240033A-BLK W
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	EB25-SA5B-012111 W	14		24		34	
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35	
6	SL-307-SA5B-SB-9.0-10.0	16		26		36	
7	SL-307-SA5B-SB-14.0-15.0	17		27		37	
8	#1 MS	18		28		38	
9	#1 MSD	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25750Q4 0

VALIDATION FINDINGS CHECKLIST

Reviewer: MF
2nd Reviewer: [illegible]

Method: GC X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ~~%D~~ or %R	✓			
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25750Q40

VALIDATION FINDINGS CHECKLIST

Reviewer: W
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25420Q40
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: AW
2nd Reviewer:

METHOD: (X) GC (X) 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
	8/9	PETN	79 (80-124)	( )	( )	1	J/UJ/A (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25750Q2p8
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: MA
2nd Reviewer: C

METHOD: GC_____HPLC X

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 (5th std)	Recalculated CF (5th std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/10/11	C (CLA)	191	191	194	194	3.4	3.6
			G ↓	193	193	202	202	6.0	6.0
			C (CLB)	373	373	393	393	10.1	10.1
2			G ↓	194	194	195	195	8.0	8.0
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 #: 25450Q40
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: VA
2nd Reviewer: A

METHOD: GC_____HPLC X

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	6E12010.42	1/26/11	C (Cl-A)	500.50	494.75	494.75	1.1	1.1
			G ↓	500.50	474.75	474.75	5.1	5.1
			C (Cl-B)	500.50	490.34	490.34	2.0	2.0
2			G ↓	500.50	483.99	483.99	3.3	3.3
	6E12010.03	2/2/11	C (Cl-A)	500.50	500.13	500.13	0.1	0.1
			G ↓	500.50	482.41	482.41	3.6	3.6
3			C (Cl-B)	500.50	474.11	474.11	5.3	5.3
			G ↓	500.50	487.74	487.74	2.5	2.5
	6E12010.15	2/3/11	C (Cl-A)	1001.60	1003.95	1003.95	0.3	0.3
4			G ↓	1001.00	975.52	975.52	2.5	2.5
			C (Cl-B)	1001.00	950.06	950.06	5.1	5.1
			G ↓	1001.00	999.74	999.74	0.1	0.1

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 #: 45150Q40

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: MT
2nd reviewer: A

METHOD: ___ GC X 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: 7

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
2-NMX	A	2000	2038.8	102	102	0

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: _____

LDC #: 25 TC040

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: MT
2nd Reviewer:

METHOD: ~~GC~~ X 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

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100

Where SSC = Spiked sample concentration; SC = Sample concentration; SA = Spike added; MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 8/9

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)	2000.25	2000.25	ND	1866.94	1911.57	93	93	96	96	2	2
2,4,6-Trinitrotoluene (8330)	1999.2	1999.2	ND	1926.20	1959.69	96	96	98	98	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 #: 25750Q40

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: WT
2nd Reviewer: C

METHOD: ~~X~~GC X HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1102900006A-LCS

Compound	Spike Added (ug/kg)		Spike 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)	2000.25	n/a	1903.29	n/a	95	95				
2,4,6-Trinitrotoluene (8330)	1999.2	n/a	2030.77	n/a	102	102				

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 #: 25750Q40

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MT
2nd Reviewer: [signature]

METHOD: __ GC X HPLC

X N N/A Were all reported results recalculated and verified for all level IV samples?
X 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. ALL Compound Name ALL

Concentration = [signature]

MD

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: January 21, 2011

LDC Report Date: July 11, 2011

Matrix: Soil/Water

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0

Introduction

This data review covers 6 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 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.

N Presumptive evidence of presence of the constituent.

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.

Sample EB25-SA5B-012111 was identified as an equipment blank. No terphenyl contaminants were found in this blank.

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

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.

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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

The QAPP reporting limits (RL) were met with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG DE066	o-Terphenyl m-Terphenyl p-Terphenyl	Laboratory reporting limit reported at 3.5 mg/Kg.	Reporting limit should be reported at 0.167 mg/Kg per the QAPP.	None None None	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE066	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 DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	o-Terphenyl m-Terphenyl p-Terphenyl	None None None	P	Compound quantitation and CRQLs (*IX)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q41 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-7-11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MF
2nd Reviewer: A

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: 1/21/11
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	N	Client Specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs SW	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB=4

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-308-SA5B-SB-4.0-5.0 S	11		21		31	1102500 13A-BLK	S
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	1102400 13A-BLK	W
3	SL-308-SA5B-SB-14.0-15.0 W	13		23		33		
4	EB25-SA5B-012111 W	14		24		34		
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35		
6	SL-307-SA5B-SB-9.0-10.0	16		26		36		
7	SL-307-SA5B-SB-14.0-15.0 W	17		27		37		
8		18		28		38		
9		19		29		39		
10		20		30		40		

Notes:

LDC #: 25750Q4

VALIDATION FINDINGS CHECKLIST

Reviewer: MT
2nd Reviewer: A

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? C %D or ____ %R				
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25750Q4

VALIDATION FINDINGS CHECKLIST

Reviewer: LD
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: VM
2nd Reviewer: CA

METHOD: X GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

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
	ALL	Lab RL's higher than QAPP. QAPP = 0.167 mg/kg lab = 3.5 mg/kg	ALL SOIL	TEXT (Z)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25750Q41
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JAf
2nd Reviewer: [signature]

METHOD: GC X 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 ($16.F4_{std}$)	Recalculated CF ($16.F4_{std}$)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/20/11	O-Terphenyl	2.55 E4	2.55 E4	2.54 E4	2.54 E4	0.8	0.8
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 #: 25750Q41
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: VA
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	R027.57R	1/29/11	O-Terphenyl	32.28	34.07	34.07	5.5	5.5
	R027.68R	1/29/11	O-Terphenyl	32.28	33.94	33.94	5.1	5.1
2	R027.78R	1/29/11	O-Terphenyl	32.28	34.82	34.82	7.9	7.9
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 #: 25450 Q41

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: A

METHOD: X 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: 7

Surrogate	Detector Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
N-Tricontane	FID	0.33	0.355	106	106	0

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: ___

LDC #: 25750Q4/

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: RL
2nd Reviewer: C

METHOD: X GC __HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1102500134-LCS

Compound	Spike Added (mg/kg)		Spike 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)										
O-Terphenyl	1.67	n/a	1.62	n/a	97	97				

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 #: 25750Q41

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: NF
2nd Reviewer: [signature]

METHOD: X GC __ HPLC

N N/A Were all reported results recalculated and verified for all level IV samples?
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. ALL Compound Name A-LL

Concentration = [signature]

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: January 21, 2011

LDC Report Date: July 7, 2011

Matrix: Soil/Water

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-308-SA5B-SB-14.0-15.0MS
SL-308-SA5B-SB-14.0-15.0MSD

Introduction

This data review covers 8 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 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.

N Presumptive evidence of presence of the constituent.

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.

Sample EB25-SA5B-012111 was identified as an equipment blank. No alcohol contaminants were found in this blank.

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 (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 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 DE066	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
Alcohols - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q43 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/06/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SW
2nd Reviewer: A

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: 1/21/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	A	ccv/icv ≤ 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 and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 4

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-308-SA5B-SB-4.0-5.0 S	11	PBLK 23025	21		31	
2	SL-308-SA5B-SB-9.0-10.0	12	PBLK 20027	22		32	
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	EB25-SA5B-012111 W	14		24		34	
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35	
6	SL-307-SA5B-SB-9.0-10.0	16		26		36	
7	SL-307-SA5B-SB-14.0-15.0	17		27		37	
8	SL-308-SA5B-SB-14.0-15.0 MS			28		38	
9	SL-308-SA5B-SB-14.0-15.0 MSD			29		39	
10		20		30		40	

Notes:

LDC #: 25150 Q 43

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
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) of one or more surrogates was 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?	✓			
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				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25750 Q43

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/19/2011	Methanol	2.519	2.519	2.508	2.508	4.2	4.2
	H2739B								

C	A
5000	12596.8

Conc	Methanol
1000	2.666
2500	2.515
5000	2.519
10000	2.465
2.37	2.374
X=	2.508
S=	0.106

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 #: 25750 Q 43

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/28/2011	Methanol	8.029	8.029	8.239	8.239	6.2	6.2
	H2739A								

C	A
5000	40144.79

Conc	Methanol
1000	9.068
2500	8.387
5000	8.029
10000	7.861
2.37	7.851
X=	8.239
S=	0.512

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 # 26750 Q43
SDG # See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: DVB
2nd Reviewer: A

METHOD: GC / HPLC____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0004	1/25/2011	Methanol	5000	5232.18	5232.06	4.6	4.6
	H2739B							
2	0027	1/26/2011	Methanol	5000	5073.68	5073.37	1.5	1.5
	H2739B							
3	0039	1/26/2011	Methanol	5000	5278.74	4905.10	1.9	1.9
	H2739B							
4	0048	1/29/2011	Methanol	2500	2607.35	2611.05	4.3	4.4
	H2739A							

	Compound	Height	CF
CCV1	Methanol	13122	2.508
CCV1	Methanol	12724	2.508
CCV3	Methanol	12302	2.508
CCV4	Methanol	21513	8.239

LDC #: 25750 Q43

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: [illegible]

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	
Acetone	cal. B	2500	2076.154	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 #: 25750 R43

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JNG
2nd Reviewer: C

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

RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100

Where SSC = Spiked sample concentration; SC = Sample concentration; SA = Spike added; MS = Matrix spike; MSD = Matrix spike duplicate

MS/MSD samples: 8/9

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)											
methanol (8015B)	2500	2500	1178.11	2614.75	2897.60	57	57	61	61	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 #: 25750 Q43

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 23025

Compound	Spike Added (ug/kg)		Spike 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 (8015B)	2500	NA	2466.7	NA	99	99				

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 #: 25750Q43

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
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. # 3 Compound Name Methanol

Concentration = $\frac{(5909)(5\text{ml})}{(2,508)(10g)(0.706)} = 1300$ ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

1300 ug/kg

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: January 21, 2011

LDC Report Date: July 7, 2011

Matrix: Soil/Water

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0

Introduction

This data review covers 6 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 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.

N Presumptive evidence of presence of the constituent.

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%.

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 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	Compound	%D	Associated Samples	Flag	A or P
2/1/11	Propylene glycol Ethylene glycol Diethylene glycol	25.0 32.8 67.2	SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	J (all detects) UJ (all non-detects)	A

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.

Sample EB25-SA5B-012111 was identified as an equipment blank. No glycol contaminants were found in this blank.

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

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.

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 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 DE066	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
Glycols - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	Propylene glycol Ethylene glycol Diethylene glycol	J (all detects) UJ (all non-detects)	A	Calibration verification (%D) (C)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q45 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/06/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV6
2nd Reviewer:

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: 1/21/11
II	Initial calibration	A	%RSD ≤ 20% r ✓
III.	Calibration verification/ICV	SW	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	EB = 4

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-308-SA5B-SB-4.0-5.0 S	11	PBLK23031	21		31	
2	SL-308-SA5B-SB-9.0-10.0	12 ✓	PBLK02024	22		32	
3	SL-308-SA5B-SB-14.0-15.0 ✓	13		23		33	
4 ✓	EB25-SA5B-012111 W	14		24		34	
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35	
6	SL-307-SA5B-SB-9.0-10.0	16		26		36	
7	SL-307-SA5B-SB-14.0-15.0 ✓	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25750 Q45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
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) of one or more surrogates was 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?	✓			
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				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 44750Q45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: SVG
2nd Reviewer:

METHOD: / GC __ HPLC

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 __%R
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 / %R validation criteria of ≤20.0% / 80-120%?
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 (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	2/01/11	F031.0039	Col. A	A	25.0	( )	1-3, 5-7	J/UJ/A (C)
				B	32.8	( )		
				C	67.2	( )		
						( )		
						( )		
						( )		
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A = Propylene glycol
B = Ethylene
C = Diethylene

LDC #: 25750Q45

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where:
H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (201.694 std)	Recalculated (201.694 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/26/2011	Ethylene glycol	612.72	612.72	563.99	563.99	14.4	14.4
	H6612A								

C	H
201.694	123582.5

Conc	Ethylene glycol
10.085	423.748
50.423	510.688
100.847	590.712
201.694	612.723
302.540	605.715
504.234	640.344
X=	563.99
S=	81.448

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 # 25750Q45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0027	2/1/2011	Ethylene glycol	302.7	292.98	292.98	3.2	3.2
2	0039	2/1/2011	Ethylene glycol	100.85	67.73	67.71	32.8	32.9

	Compound	Height	CF
CCV1	Ethylene glycol	30266	103.30
CCV2	Ethylene glycol	6995	103.30

LDC #: 25750 Q 95

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
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	
Tetramethylene glycol	CH. A	201.29 ✓	112.467	55	55.8	1

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 #: 25750Q 45

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 23 021

Compound	Spike Added (mg/kg)		Spike 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)										
E. Glycol (8015B)	205.03	NA	183.29	NA	89	89	—			

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 #: 25750 Q45

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
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 ND

Concentration =_____

#	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: January 21, 2011

LDC Report Date: July 11, 2011

Matrix: Soil/Water

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0
SL-308-SA5B-SB-9.0-10.0
SL-308-SA5B-SB-14.0-15.0
EB25-SA5B-012111
SL-307-SA5B-SB-4.0-5.0
SL-307-SA5B-SB-9.0-10.0
SL-307-SA5B-SB-14.0-15.0
SL-308-SA5B-SB-4.0-5.0MS
SL-308-SA5B-SB-4.0-5.0MSD

Introduction

This data review covers 8 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 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.

N Presumptive evidence of presence of the constituent.

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 with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
110240005A	1/24/11	Formaldehyde	12 ug/L	All water samples in SDG DE066

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
EB25-SA5B-012111	Formaldehyde	10 ug/L	50U ug/L

Sample EB25-SA5B-012111 was identified as an equipment blank. No formaldehyde was found in this blank with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB25-SA5B-012111	1/21/11	Formaldehyde	10 ug/L	All soil samples in SDG DE066

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X for contaminants) than the concentrations found in the associated field blanks.

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 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 DE066	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
Formaldehyde - Data Qualification Summary - SDG DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0 SL-308-SA5B-SB-9.0-10.0 SL-308-SA5B-SB-14.0-15.0 EB25-SA5B-012111 SL-307-SA5B-SB-4.0-5.0 SL-307-SA5B-SB-9.0-10.0 SL-307-SA5B-SB-14.0-15.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE066

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE066	EB25-SA5B-012111	Formaldehyde	50U ug/L	A	B

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q71 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-8-11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 1/21/11
II	Initial calibration	A	%RSD≤20
III.	Calibration verification/~~ICV~~	A	~~ICV~~/CCV≤20%
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates A	~~A~~	~~Client Specified~~
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	SW	EB=4

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-308-SA5B-SB-4.0-5.0 S	11		21		31	1102700005A-BLK S
2	SL-308-SA5B-SB-9.0-10.0	12		22		32	1102400005A-BLK W
3	SL-308-SA5B-SB-14.0-15.0	13		23		33	
4	EB25-SA5B-012111 W	14		24		34	
5	SL-307-SA5B-SB-4.0-5.0 S	15		25		35	
6	SL-307-SA5B-SB-9.0-10.0	16		26		36	
7	SL-307-SA5B-SB-14.0-15.0	17		27		37	
8	#1 MS	18		28		38	
9	↓ MSD	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25750Q7)

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: A

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?		✓		
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? %D or %R				
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25750Q7H

VALIDATION FINDINGS CHECKLIST

Reviewer: VM
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25750Q7|
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: AT
2nd Reviewer:

METHOD: __ GC X 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?
(N) 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?

Blank extraction date: 1/24/11 **Blank analysis date:** 1/24/11 **Associated samples:** All H2O

Conc. units: ug/L

Compound	Blank ID	Sample Identification						
	110240005A	4						
Formaldehyde	12	10/50 U						

Blank extraction date: _____ **Blank analysis date:** _____ **Associated samples:** _____

Conc. units: _____

Compound	Blank ID	Sample Identification						

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 #: 25750Q71
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of 1
Reviewer: VF
2nd Reviewer: A

METHOD: __ GC X HPLC
Y N N/A Were field blanks identified in this SDG?
Y N N/A Were target compounds detected in the field blanks?
Blank units: ug/L Associated sample units: ug/kg
Sampling date: 1/21/21
Field blank type: (circle one) Field Blank / Trip Blank / Atmospheric Blank / Ambient Blank
Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other:
Associated Samples: ALL soil

Compound	Blank ID	Sample Identification								
[redacted]	4									
Formaldehyde	10									
						ALL 5X or ND				
CRQL										

Blank units: _____ Associated sample units: _____
Sampling date: _____
Field blank type: (circle one) Field Blank / Trip Blank/ Atmospheric Blank/ Ambient Blank
Rinsate / Equipment Rinsate / Equipment Blank / Source Blank / Other:
Associated Samples: _____

Compound	Blank ID	Sample Identification								
[redacted]										
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with compound concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 25750071
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: MH
2nd Reviewer: C

METHOD: GC_____HPLC X

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 (200 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/24/11	Formaldehyde	65.2	65.2	63.9	63.9	3.3	3.3
	ICAL	1/27/11	Formaldehyde	77.4	77.4	69.2	69.2	12.6	12.6
2	ICAL	1/28/11	Formaldehyde	54.9	54.9	57.2	57.2	6.1	6.1
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 #: 25450QT1

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC _____ HPLC X

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								
			See ICAL					
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 #: 45750Q41

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: AT
2nd reviewer: C

METHOD: ___ GC X 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: 7

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Butyraldehyde	A	3989.32	4428.15	111	111	0

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: ___

LDC #: 20400H

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ___ GC X 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

RPD =(((SSCMS - SSCMSD) * 2) / (SSCMS + SSCMSD))*100

Where SSC = Spiked sample concentration
SC = Sample concentration
SA = Spike added
MS = Matrix spike
MSD = Matrix spike duplicate

MS/MSD samples: 8/9

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	5100.77	5003.11	102	102	100	100	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 #: 25 Tee 477

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: MT
2nd Reviewer:

METHOD: ___ GC (X) HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1102700005A - LCS

Compound	Spike Added (ug/kg)		Spike 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	n/a	4819.82	n/a	96	96				

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 #: 25750Q71

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: AT
2nd Reviewer: [signature]

METHOD: ___ GC X 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. 7 Compound Name Formaldehyde

Concentration = $\frac{(231203)\ (20mL)\ (1x)}{(57.2)\ (2g)\ (.817)}$

= 4947 ug/kg

#	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:	January 21, 2011
LDC Report Date:	July 8, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE066

Sample Identification

SL-308-SA5B-SB-4.0-5.0

Introduction

This data review covers one soil sample 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.

N Presumptive evidence of presence of the constituent.

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 check is not required by the method.

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 30.0% 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 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 DE066	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 DE066

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE066	SL-308-SA5B-SB-4.0-5.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE066

No Sample Data Qualified in this SDG

LDC #: 25750Q87 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/06/11
SDG #: DE066 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MG
2nd Reviewer: A

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: 1/21/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r ✓
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 15% unlabeled ; ≤ 50% labeled 400V ±30%
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
VIII.	Laboratory control samples	A	LCS ~~TB~~
IX.	Regional Quality Assurance and Quality Control	N	
X.	Internal standards	A	
XI.	Target compound identification	A	
XII.	Compound quantitation/CRQLs	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-308-SA5B-SB-4.0-5.0	11	Blank B	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	

LDC #: 25750 Q87

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C) 8270D 6850

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. Surrogate spikes				
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 #: 25750 Q87

VALIDATION FINDINGS CHECKLIST

Reviewer: JV
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/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.			✓	

LDC # 25750Q 67

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: OV
2nd Reviewer:

METHOD: EPA SW 846 Method 6850

Parameter: Perchlorate

Order of regression: Linear

Date	Instrument	Compound	Points	y area ratio	x conc ratio	RF
4-Feb-11	LCMS A5	Perchlorate	Point 1	0.024231	0.02	1.2115
			Point 2	0.044751	0.04	1.1188
			Point 3	0.098605	0.10	0.9860
			Point 4	0.210204	0.20	1.0510
			Point 5	0.432558	0.40	1.0814
			Point 6	2.739082	2.50	1.0956
						1.0907

Regression Output: Regression Output:		Reported WLR	
Constant	-0.00454	c =	-0.00450
Std Err of Y Est	0.04		
R Squared	0.99997	r^2 =	0.999997
No. of Observations	6.00		
Degrees of Freedom	4.00		
		m =	0.1097
X Coefficient(s)	1.09714		
Std Err of Coef.	0.01		

LDC # 35750 Q 87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: JM
2nd Reviewer:

METHOD:LCMS Perchlorate (EPA SW 846 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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	03411010	2/4/2011	Perchlorate (CLO4-18)	4	3.509	3.511	12.5	12.2

	y=mx+b			
CCV1	Response(y)	m	b	Conc
CLO4	0.380635625	0.1097	-0.0045	3.51

LDC #: 25750 Q 87

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JMP
2nd Reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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

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~~ CLO4	100	NA	101	NA	101	101				
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 #: 25750 Q 87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVC
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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. _____ , MB :

Conc. = ( )( )( )( )( ) / ( )( )( )( )( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE067

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
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3050B	6010B	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3050B	6020	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3060A	7199	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3546	1625C	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3550B	8015B	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3550B	8015M	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3550B	8082	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3550B	8270C	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	3550B	8270C SIM	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	5035	8015M	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	5035	8260B	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	5035	8260B SIM	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	8330	8330A	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	Gen Prep	9045M	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	300.0	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	314.0	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	7471A	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	8015B	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	8015M	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	8315A	III
24-Jan-2011	SL-155-SA5B-SB-3.5-4.5	6190393	N	METHOD	9012B	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3050B	6010B	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3050B	6020	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3060A	7199	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3546	1625C	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	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
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3550B	8015M	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3550B	8082	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3550B	8270C	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	3550B	8270C SIM	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	5035	8015M	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	5035	8260B	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	5035	8260B SIM	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	8330	8330A	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	Gen Prep	9045M	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	300.0	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	314.0	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	6850	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	7471A	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	8015B	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	8015M	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	8315A	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0	6190384	N	METHOD	9012B	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0DUP	P190384D291100B	DUP	Gen Prep	9045M	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0MSD	P190384M241937A	MSD	3550B	8082	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0MSD	P190384M320240A	MSD	3550B	8015M	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0MS	P190384R241918A	MS	3550B	8082	III
24-Jan-2011	SL-033-SA5B-SB-4.0-5.0MS	P190384R320215A	MS	3550B	8015M	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3050B	6010B	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3050B	6020	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3060A	7199	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3546	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
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3550B	8015B	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3550B	8015M	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3550B	8082	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3550B	8270C	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	3550B	8270C SIM	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	5035	8015M	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	5035	8260B	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	5035	8260B SIM	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	8330	8330A	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	Gen Prep	9045M	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	300.0	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	314.0	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	7471A	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	8015B	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	8015M	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	8315A	III
24-Jan-2011	SL-033-SA5B-SB-9.0-10.0	6190385	N	METHOD	9012B	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3050B	6010B	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3050B	6020	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3060A	7199	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3546	1625C	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3550B	8015B	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3550B	8015M	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3550B	8082	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	3550B	8270C	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	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
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	5035	8015M	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	5035	8260B	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	5035	8260B SIM	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	8330	8330A	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	Gen Prep	9045M	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	300.0	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	314.0	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	7471A	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	8015B	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	8015M	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	8315A	III
24-Jan-2011	SL-033-SA5B-SB-14.0-15.0	6190386	N	METHOD	9012B	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3050B	6010B	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3050B	6020	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3060A	7199	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3546	1625C	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3550B	8015B	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3550B	8015M	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3550B	8082	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3550B	8270C	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	3550B	8270C SIM	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	5035	8015M	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	5035	8260B	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	5035	8260B SIM	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	8330	8330A	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	Gen Prep	9045M	III

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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
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	300.0	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	314.0	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	7471A	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	8015B	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	8015M	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	8315A	III
24-Jan-2011	SL-154-SA5B-SB-4.0-5.0	6190392	N	METHOD	9012B	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	3050B	6010B	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	3050B	6020	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	3060A	7199	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	3550B	8082	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	3550B	8270C	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	3550B	8270C SIM	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	Gen Prep	9045M	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	METHOD	300.0	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	METHOD	314.0	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	METHOD	6850	III
24-Jan-2011	SL-151-SA5B-SB-7.0-8.0	6190388	N	METHOD	7471A	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	3050B	6010B	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	3050B	6020	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	3060A	7199	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	3550B	8082	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	3550B	8270C	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	3550B	8270C SIM	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	5035	8260B	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	5035	8260B SIM	III

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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
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	Gen Prep	9045M	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	METHOD	300.0	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	METHOD	314.0	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0	6190387	N	METHOD	7471A	III
24-Jan-2011	SL-151-SA5B-SB-4.0-5.0MS	P190387R210338A	MS	5035	8260B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3060A	7199	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3546	1625C	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3550B	8015B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3550B	8015M	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3550B	8082	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3550B	8270C	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	3550B	8270C SIM	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	5035	8015M	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	5035	8260B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	5035	8260B SIM	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	8330	8330A	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	Gen Prep	9045M	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	300.0	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	314.0	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	7471A	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	8015B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	8015M	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	8315A	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0	6190381	N	METHOD	9012B	III

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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
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D220029A	DUP	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D220720A	DUP	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D220720B	DUP	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D220720C	DUP	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D220720D	DUP	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D221208	DUP	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D221231	DUP	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D221910	DUP	METHOD	7471A	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D270509A	DUP	METHOD	300.0	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D271349A	DUP	METHOD	314.0	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0DUP	P190381D272120A	DUP	METHOD	9012B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M220033A	MSD	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M220726A	MSD	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M220726B	MSD	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M220726C	MSD	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M220726D	MSD	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M221216	MSD	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M221239	MSD	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M221912	MSD	METHOD	7471A	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M260353	MSD	3550B	8270C	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M260528	MSD	3550B	8270C SIM	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M320829A	MSD	3550B	8015B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MSD	P190381M321901A	MSD	METHOD	8015M	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R220031A	MS	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R220723A	MS	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R220723B	MS	3050B	6020	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R220723C	MS	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R220723D	MS	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R221212	MS	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R221235	MS	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R221911	MS	METHOD	7471A	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R260328	MS	3550B	8270C	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R260425	MS	3550B	8270C SIM	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R270524A	MS	METHOD	300.0	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R271412A	MS	METHOD	314.0	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R272124A	MS	METHOD	9012B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R320744A	MS	3550B	8015B	III
24-Jan-2011	SL-032-SA5B-SB-4.0-5.0MS	P190381R321844A	MS	METHOD	8015M	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3060A	7199	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3546	1625C	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3550B	8015B	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3550B	8015M	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3550B	8082	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3550B	8270C	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	3550B	8270C SIM	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	5035	8015M	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	5035	8260B	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	5035	8260B SIM	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	8330	8330A	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	Gen Prep	9045M	III

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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
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	300.0	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	314.0	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	7471A	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	8015B	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	8015M	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	8315A	III
24-Jan-2011	SL-032-SA5B-SB-9.0-10.0	6190382	N	METHOD	9012B	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3050B	6010B	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3050B	6020	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3060A	7199	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3546	1625C	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3550B	8015B	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3550B	8015M	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3550B	8082	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3550B	8270C	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	3550B	8270C SIM	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	5035	8015M	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	5035	8260B	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	5035	8260B SIM	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	8330	8330A	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	Gen Prep	9045M	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	300.0	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	314.0	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	7471A	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	8015B	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	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
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	8315A	III
24-Jan-2011	SL-032-SA5B-SB-14.0-15.0	6190383	N	METHOD	9012B	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	3050B	6010B	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	3050B	6020	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	3060A	7199	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	3550B	8082	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	3550B	8270C	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	3550B	8270C SIM	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	Gen Prep	9045M	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	METHOD	300.0	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	METHOD	314.0	III
24-Jan-2011	SL-152-SA5B-SB-9.0-10.0	6190390	N	METHOD	7471A	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	3050B	6010B	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	3050B	6020	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	3060A	7199	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	3550B	8082	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	3550B	8270C	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	3550B	8270C SIM	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	5035	8260B	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	5035	8260B SIM	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	Gen Prep	9045M	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	METHOD	300.0	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	METHOD	314.0	III
24-Jan-2011	SL-152-SA5B-SB-4.0-5.0	6190389	N	METHOD	7471A	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	3050B	6010B	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	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
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	3060A	7199	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	3550B	8082	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	3550B	8270C	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	3550B	8270C SIM	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	5035	8260B	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	5035	8260B SIM	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	Gen Prep	9045M	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	METHOD	300.0	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	METHOD	314.0	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0	6190391	N	METHOD	7471A	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0DUP	P190391D270951B	DUP	METHOD	300.0	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0DUP	P190391D271848B	DUP	METHOD	314.0	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0DUP	P190391D271911A	DUP	3060A	7199	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0MS	P190391R271038B	MS	METHOD	300.0	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0MS	P190391R271833A	MS	3060A	7199	III
24-Jan-2011	SL-153-SA5B-SB-4.0-5.0MS	P190391R271912B	MS	METHOD	314.0	III
24-Jan-2011	TB-012411	6190394	TB	5030B	8015M	III
24-Jan-2011	TB-012411	6190394	TB	5030B	8260B	III
24-Jan-2011	TB-012411	6190394	TB	5030B	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: DE067 Laboratory: LL

EDD Filename: PrepDE067_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.5	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.88	J	0.975	MDL	5.48	PQL	mg/Kg	J	Z
CALCIUM	1590		6.72	MDL	21.9	PQL	mg/Kg	J	E
IRON	17900		5.16	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	278		0.614	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2400		19.7	MDL	54.8	PQL	mg/Kg	J	Q, E
TIN	2.54	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
TITANIUM	1050		0.416	MDL	1.10	PQL	mg/Kg	J	E
Zirconium	1.89	J	0.920	MDL	5.48	PQL	mg/Kg	U	B

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	10400		6.81	MDL	22.2	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	16700		5.23	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	328		0.622	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	2800		20.0	MDL	55.6	PQL	mg/Kg	J	Q, E
TIN	2.47	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
TITANIUM	1000		0.422	MDL	1.11	PQL	mg/Kg	J	E
Zirconium	2.41	J	0.933	MDL	5.56	PQL	mg/Kg	U	B

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.08	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
CALCIUM	2080		6.67	MDL	21.8	PQL	mg/Kg	J	E
IRON	18300		5.13	MDL	21.8	PQL	mg/Kg	J	E
PHOSPHORUS	324		0.609	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3160		19.6	MDL	54.4	PQL	mg/Kg	J	Q, E
TIN	2.36	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
TITANIUM	1140		0.413	MDL	1.09	PQL	mg/Kg	J	E
Zirconium	2.22	J	0.914	MDL	5.44	PQL	mg/Kg	U	B

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.60	J	0.952	MDL	5.35	PQL	mg/Kg	J	Z
CALCIUM	2250		6.56	MDL	21.4	PQL	mg/Kg	J	E
IRON	16500		5.04	MDL	21.4	PQL	mg/Kg	J	E
PHOSPHORUS	323		0.599	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2920		19.3	MDL	53.5	PQL	mg/Kg	J	Q, E
TIN	2.41	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1010		0.406	MDL	1.07	PQL	mg/Kg	J	E
Zirconium	1.10	J	0.898	MDL	5.35	PQL	mg/Kg	U	B

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 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
BORON	1.51	J	0.965	MDL	5.42	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 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
CALCIUM	7460		6.65	MDL	21.7	PQL	mg/Kg	J	E
IRON	7920		5.11	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	600		0.607	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1140		19.5	MDL	54.2	PQL	mg/Kg	J	Q, E
TIN	1.74	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	531		0.412	MDL	1.08	PQL	mg/Kg	J	E
Zirconium	1.96	J	0.911	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.71	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
CALCIUM	2130		6.72	MDL	21.9	PQL	mg/Kg	J	E
IRON	17000		5.17	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	343		0.614	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3100		19.7	MDL	54.8	PQL	mg/Kg	J	Q, E
TIN	2.48	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
TITANIUM	1040		0.417	MDL	1.10	PQL	mg/Kg	J	E
Zirconium	1.83	J	0.921	MDL	5.48	PQL	mg/Kg	U	B

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.11	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
CALCIUM	2950		6.94	MDL	22.6	PQL	mg/Kg	J	E
IRON	25500		5.33	MDL	22.6	PQL	mg/Kg	J	E
PHOSPHORUS	186		0.634	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	1850		20.4	MDL	56.6	PQL	mg/Kg	J	Q, E
TIN	2.89	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1220		0.430	MDL	1.13	PQL	mg/Kg	J	E
Zirconium	2.43	J	0.951	MDL	5.66	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-151-SA5B-SB-7.0-8.0 ***Collected:*** 1/24/2011 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
BORON	1.72	J	1.02	MDL	5.72	PQL	mg/Kg	J	Z
CALCIUM	3510		7.02	MDL	22.9	PQL	mg/Kg	J	E
IRON	23600		5.39	MDL	22.9	PQL	mg/Kg	J	E
PHOSPHORUS	269		0.641	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	2080		20.6	MDL	57.2	PQL	mg/Kg	J	Q, E
TIN	2.89	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1150		0.435	MDL	1.14	PQL	mg/Kg	J	E
Zirconium	2.27	J	0.961	MDL	5.72	PQL	mg/Kg	U	B

Sample ID: SL-152-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 2:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.27	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
CALCIUM	2920		6.99	MDL	22.8	PQL	mg/Kg	J	E
IRON	27200		5.37	MDL	22.8	PQL	mg/Kg	J	E
PHOSPHORUS	230		0.638	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	2170		20.5	MDL	57.0	PQL	mg/Kg	J	Q, E
TIN	2.32	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1230		0.433	MDL	1.14	PQL	mg/Kg	J	E
Zirconium	2.88	J	0.958	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 2:45:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.34	J	0.995	MDL	5.59	PQL	mg/Kg	J	Z
CALCIUM	3260		6.85	MDL	22.4	PQL	mg/Kg	J	E
IRON	22800		5.27	MDL	22.4	PQL	mg/Kg	J	E
PHOSPHORUS	206		0.626	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	1820		20.1	MDL	55.9	PQL	mg/Kg	J	Q, E
SODIUM	87.9	J	41.7	MDL	112	PQL	mg/Kg	J	Z
TIN	2.92	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1200		0.425	MDL	1.12	PQL	mg/Kg	J	E
Zirconium	1.87	J	0.939	MDL	5.59	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2560		6.65	MDL	21.7	PQL	mg/Kg	J	E
IRON	20300		5.11	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	192		0.607	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1680		19.5	MDL	54.2	PQL	mg/Kg	J	Q, E
TIN	2.96	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	1150		0.412	MDL	1.08	PQL	mg/Kg	J	E
Zirconium	1.40	J	0.911	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.72	J	1.01	MDL	5.69	PQL	mg/Kg	J	Z
CALCIUM	1940		6.97	MDL	22.8	PQL	mg/Kg	J	E
IRON	19900		5.36	MDL	22.8	PQL	mg/Kg	J	E
PHOSPHORUS	117		0.637	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	1080		20.5	MDL	56.9	PQL	mg/Kg	J	Q, E
TIN	2.62	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	923		0.432	MDL	1.14	PQL	mg/Kg	J	E
Zirconium	2.71	J	0.956	MDL	5.69	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 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
BORON	1.06	J	0.973	MDL	5.47	PQL	mg/Kg	J	Z
CALCIUM	2370		6.70	MDL	21.9	PQL	mg/Kg	J	E
IRON	23900		5.15	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	331		0.612	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2060		19.7	MDL	54.7	PQL	mg/Kg	J	Q, E
TIN	3.07	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
TITANIUM	1170		0.415	MDL	1.09	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: PrepDE067_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.107	J	0.0447	MDL	0.112	PQL	mg/Kg	J	Z
NICKEL	10.9		0.112	MDL	0.447	PQL	mg/Kg	J	Q, E

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0812	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.598		0.0559	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0872	J	0.0670	MDL	0.223	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	4.33		0.0894	MDL	0.447	PQL	mg/Kg	J	E
CHROMIUM	14.2		0.134	MDL	0.447	PQL	mg/Kg	J	Q
COBALT	5.46		0.0223	MDL	0.112	PQL	mg/Kg	J	E
LEAD	4.81		0.0116	MDL	0.223	PQL	mg/Kg	J	E, Q
SILVER	0.0443	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.288		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	27.2		0.0246	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	18.0		0.107	MDL	0.427	PQL	mg/Kg	J	Q, E

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.58		0.0534	MDL	0.107	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: PrepDE067_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	3.13		0.0641	MDL	0.214	PQL	mg/Kg	J	E, Q
ARSENIC	70.5		0.0855	MDL	0.427	PQL	mg/Kg	J	E
CHROMIUM	15.3		0.128	MDL	0.427	PQL	mg/Kg	J	Q
COBALT	6.53		0.0214	MDL	0.107	PQL	mg/Kg	J	E
LEAD	9.81		0.0111	MDL	0.214	PQL	mg/Kg	J	E, Q
SILVER	0.0318	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.324		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	52.0		0.0235	MDL	0.107	PQL	mg/Kg	J	E, A

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	13.3		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.107	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.874		0.0549	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0659	MDL	0.220	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	3.45		0.0879	MDL	0.440	PQL	mg/Kg	J	E
CHROMIUM	15.3		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	5.09		0.0220	MDL	0.110	PQL	mg/Kg	J	E
LEAD	5.52		0.0114	MDL	0.220	PQL	mg/Kg	J	E, Q
SILVER	0.0291	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.249		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	28.9		0.0242	MDL	0.110	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0708	J	0.0428	MDL	0.107	PQL	mg/Kg	J	Z
NICKEL	10.8		0.107	MDL	0.428	PQL	mg/Kg	J	Q, E

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.115	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.489		0.0535	MDL	0.107	PQL	mg/Kg	J	E

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0691	J	0.0642	MDL	0.214	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	4.09		0.0856	MDL	0.428	PQL	mg/Kg	J	E
CHROMIUM	14.6		0.128	MDL	0.428	PQL	mg/Kg	J	Q
COBALT	5.17		0.0214	MDL	0.107	PQL	mg/Kg	J	E
LEAD	5.41		0.0111	MDL	0.214	PQL	mg/Kg	J	E, Q
SILVER	0.0370	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.262		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	28.4		0.0235	MDL	0.107	PQL	mg/Kg	J	E, A

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:13:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0803	J	0.0438	MDL	0.110	PQL	mg/Kg	J	Z
NICKEL	6.26		0.110	MDL	0.438	PQL	mg/Kg	J	Q, E

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:13:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0439	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: SL-033-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 10:13:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.471		0.0548	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-033-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 10:13:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0657	U	0.0657	MDL	0.219	PQL	mg/Kg	UJ	E, Q
ARSENIC	2.16		0.0876	MDL	0.438	PQL	mg/Kg	J	E
CHROMIUM	10.7		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	3.56		0.0219	MDL	0.110	PQL	mg/Kg	J	E
LEAD	2.96		0.0114	MDL	0.219	PQL	mg/Kg	J	E, Q
THALLIUM	0.151		0.0329	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	20.0		0.0241	MDL	0.110	PQL	mg/Kg	J	E, A

Sample ID: SL-033-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 10:24:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	11.0		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E

Sample ID: SL-033-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 10:24:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 10:24:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.478		0.0554	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-033-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 10:24:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0664	MDL	0.221	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	3.77		0.0886	MDL	0.443	PQL	mg/Kg	J	E
CHROMIUM	15.0		0.133	MDL	0.443	PQL	mg/Kg	J	Q
COBALT	5.38		0.0221	MDL	0.111	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: PrepDE067_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.05		0.0115	MDL	0.221	PQL	mg/Kg	J	E, Q
SILVER	0.0381	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.247		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	28.4		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0687	J	0.0444	MDL	0.111	PQL	mg/Kg	J	Z
NICKEL	16.1		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0857	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.561		0.0555	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0713	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	5.70		0.0888	MDL	0.444	PQL	mg/Kg	J	E
CHROMIUM	22.8		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	7.01		0.0222	MDL	0.111	PQL	mg/Kg	J	E
LEAD	6.94		0.0115	MDL	0.222	PQL	mg/Kg	J	E, Q
SILVER	0.0429	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.294		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	42.6		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 1:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0470	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z
NICKEL	12.2		0.112	MDL	0.449	PQL	mg/Kg	J	Q, E

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 1:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.192		0.0561	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 1:10:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0888	J	0.0673	MDL	0.224	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	5.03		0.0898	MDL	0.449	PQL	mg/Kg	J	E
CHROMIUM	18.9		0.135	MDL	0.449	PQL	mg/Kg	J	Q
COBALT	3.65		0.0224	MDL	0.112	PQL	mg/Kg	J	E
LEAD	4.43		0.0117	MDL	0.224	PQL	mg/Kg	J	E, Q
SILVER	0.100	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.226		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	33.7		0.0247	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0602	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Z
NICKEL	16.2		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.621		0.0570	MDL	0.114	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.100	J	0.0684	MDL	0.228	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	5.67		0.0912	MDL	0.456	PQL	mg/Kg	J	E
CHROMIUM	23.1		0.137	MDL	0.456	PQL	mg/Kg	J	Q
COBALT	6.42		0.0228	MDL	0.114	PQL	mg/Kg	J	E
LEAD	6.91		0.0119	MDL	0.228	PQL	mg/Kg	J	E, Q
SILVER	0.0449	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
THALLIUM	0.263		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	43.2		0.0251	MDL	0.114	PQL	mg/Kg	J	E, A

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0787	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Z
NICKEL	15.7		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0657	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.422		0.0570	MDL	0.114	PQL	mg/Kg	J	E

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.155	J	0.0684	MDL	0.228	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	8.16		0.0912	MDL	0.456	PQL	mg/Kg	J	E
CHROMIUM	22.6		0.137	MDL	0.456	PQL	mg/Kg	J	Q
COBALT	5.47		0.0228	MDL	0.114	PQL	mg/Kg	J	E
LEAD	15.2		0.0119	MDL	0.228	PQL	mg/Kg	J	E, Q
SILVER	0.0824	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
THALLIUM	0.302		0.0342	MDL	0.114	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	46.5		0.0251	MDL	0.114	PQL	mg/Kg	J	E, A

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	10.9		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0863	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.358		0.0532	MDL	0.106	PQL	mg/Kg	J	E

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0958	J	0.0638	MDL	0.213	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	9.06		0.0851	MDL	0.425	PQL	mg/Kg	J	E
CHROMIUM	15.8		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	6.59		0.0213	MDL	0.106	PQL	mg/Kg	J	E
LEAD	5.35		0.0111	MDL	0.213	PQL	mg/Kg	J	E, Q
SILVER	0.0132	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z
THALLIUM	0.265		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	33.0		0.0234	MDL	0.106	PQL	mg/Kg	J	E, A

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	8.88		0.112	MDL	0.446	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0521	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.248		0.0558	MDL	0.112	PQL	mg/Kg	J	E

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0876	J	0.0669	MDL	0.223	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	4.37		0.0892	MDL	0.446	PQL	mg/Kg	J	E
CHROMIUM	16.2		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	2.84		0.0223	MDL	0.112	PQL	mg/Kg	J	E
LEAD	4.69		0.0116	MDL	0.223	PQL	mg/Kg	J	E, Q
SILVER	0.0519	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.163		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	31.4		0.0245	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 9:33:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0702	J	0.0442	MDL	0.110	PQL	mg/Kg	J	Z
NICKEL	12.5		0.110	MDL	0.442	PQL	mg/Kg	J	Q, E

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 9:33:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.148	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 9:33:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.573		0.0552	MDL	0.110	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 9:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0662	MDL	0.221	PQL	mg/Kg	UJ	E, Q, B
ARSENIC	11.6		0.0883	MDL	0.442	PQL	mg/Kg	J	E
CHROMIUM	16.5		0.132	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	9.59		0.0221	MDL	0.110	PQL	mg/Kg	J	E
LEAD	8.90		0.0115	MDL	0.221	PQL	mg/Kg	J	E, Q
THALLIUM	0.381		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	39.4		0.0243	MDL	0.110	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.33	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.88	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *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	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 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
HEXAVALENT CHROMIUM	0.48	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.45	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 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
HEXAVALENT CHROMIUM	0.37	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *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

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 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
HEXAVALENT CHROMIUM	0.27	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0147	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0124	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 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
MERCURY	0.0055	J	0.0033	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0063	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0072	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: PrepDE067_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C Matrix: SO

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *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	20.5	J	18.8	MDL	37.6	PQL	ng/Kg	J	Z

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:13:00 *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	24.0	J	18.4	MDL	36.9	PQL	ng/Kg	J	Z

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *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	20.9	J	19.0	MDL	37.9	PQL	ng/Kg	J	Z

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 9:33:00 *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	28.9	J	18.8	MDL	37.5	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M Matrix: SO

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *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)	0.77	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *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)	0.77	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:13:00 *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)	2.9		0.44	MDL	1.3	PQL	mg/Kg	J	Q, Q
EFH (C30-C40)	7.0		0.44	MDL	1.3	PQL	mg/Kg	J	Q, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C12-C14)	0.50	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-032-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:35:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-033-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 10:32:00 *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 1254	0.99	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	3.8		1.1	MDL	3.7	PQL	ug/Kg	J	L

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *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 1254	1.3	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.78	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TRICHLOROPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2,4,6-TRICHLOROPHENOL	37	U	37	MDL	190	PQL	ug/Kg	UJ	Q
2,4-DICHLOROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
2-NITROPHENOL	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *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	40	J	19	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *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	30	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-152-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 2:45:00 *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	27	J	19	MDL	390	PQL	ug/Kg	U	B

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *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	20	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA

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

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *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(B)FLUORANTHENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.9	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.2	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-032-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:24:00 *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(B)FLUORANTHENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.43	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-032-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 2:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.46	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5B-SB-14.0-15.0 ***Collected:*** 1/24/2011 10:32:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.4	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.44	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.88	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 10:13:00 ***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(B)FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.92	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 10:24:00 ***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	7.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.66	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.95	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
FLUORENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-151-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 1:23:00 ***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	14	J	6.9	MDL	21	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: PrepDE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-151-SA5B-SB-7.0-8.0 *Collected:* 1/24/2011 1:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *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	7.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA5B-SB-3.5-4.5 *Collected:* 1/24/2011 9:33:00 *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	7.3	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix:** SO

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	16000	J	6700	MDL	17000	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-032-SA5B-SB-14.0-15.0 *Collected:* 1/24/2011 2:44:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	420	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-033-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:13:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	120	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: SL-032-SA5B-SB-14.0-15.0 ***Collected:*** 1/24/2011 2:44:00 ***Analysis Type:*** RES ***Dilution:*** 0.75

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.5	J	1.0	MDL	6.8	PQL	ug/Kg	J	Z
2-Chloro-1,1,1-trifluoroethane	0.42	U	0.42	MDL	4.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.39	J	0.20	MDL	3.4	PQL	ug/Kg	U	B

Sample ID: SL-032-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 2:24:00 ***Analysis Type:*** RES ***Dilution:*** 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.50	U	0.50	MDL	5.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	1.4	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-032-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 2:35:00 ***Analysis Type:*** RES ***Dilution:*** 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.45	U	0.45	MDL	4.5	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.49	J	0.21	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-033-SA5B-SB-14.0-15.0 ***Collected:*** 1/24/2011 10:32:00 ***Analysis Type:*** RES ***Dilution:*** 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	2.8	J	1.2	MDL	8.1	PQL	ug/Kg	J	Z
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.54	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-033-SA5B-SB-4.0-5.0 ***Collected:*** 1/24/2011 10:13:00 ***Analysis Type:*** RES ***Dilution:*** 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.46	U	0.46	MDL	4.6	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.41	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-033-SA5B-SB-9.0-10.0 ***Collected:*** 1/24/2011 10:24:00 ***Analysis Type:*** RES ***Dilution:*** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2-Dibromoethane (EDB)	0.42	J	0.17	MDL	4.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: PrepDE067_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-033-SA5B-SB-9.0-10.0 *Collected:* 1/24/2011 10:24:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.49	U	0.49	MDL	4.9	PQL	ug/Kg	UJ	L
BENZENE	0.10	J	0.1	MDL	4.0	PQL	ug/Kg	J	Z
ETHYLBENZENE	0.29	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.8	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
N-PROPYLBENZENE	0.09	J	0.07	MDL	4.0	PQL	ug/Kg	J	Z
O-XYLENE	0.20	J	0.17	MDL	4.0	PQL	ug/Kg	J	Z
P-ISOPROPYLTOLUENE	0.18	J	0.11	MDL	4.0	PQL	ug/Kg	J	Z
SEC-BUTYLBENZENE	0.08	J	0.06	MDL	4.0	PQL	ug/Kg	J	Z
TOLUENE	0.10	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-151-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 1:23:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.48	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-152-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 2:57:00 *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.47	U	0.47	MDL	4.7	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.50	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-153-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 4:08:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.48	U	0.48	MDL	4.8	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-154-SA5B-SB-4.0-5.0 *Collected:* 1/24/2011 10:49:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.50	U	0.50	MDL	5.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-155-SA5B-SB-3.5-4.5** ***Collected:*** **1/24/2011 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-Chloro-1,1,1-trifluoroethane	0.57	U	0.57	MDL	5.7	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.69	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: PrepDE067_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE067

Method Blank Outlier Report

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: DE067_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02708AB221212	1/31/2011 12:12:00 PM	CALCIUM PHOSPHORUS TIN	9.22 mg/Kg 1.07 mg/Kg 1.43 mg/Kg	SL-032-SA5B-SB-14.0-15.0 SL-032-SA5B-SB-4.0-5.0 SL-032-SA5B-SB-9.0-10.0 SL-033-SA5B-SB-14.0-15.0 SL-033-SA5B-SB-4.0-5.0 SL-033-SA5B-SB-9.0-10.0 SL-151-SA5B-SB-4.0-5.0 SL-151-SA5B-SB-7.0-8.0 SL-152-SA5B-SB-4.0-5.0 SL-152-SA5B-SB-9.0-10.0 SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5

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-032-SA5B-SB-14.0-15.0(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-032-SA5B-SB-4.0-5.0(RES)	TIN	2.47 mg/Kg	2.47U mg/Kg
SL-032-SA5B-SB-9.0-10.0(RES)	TIN	2.36 mg/Kg	2.36U mg/Kg
SL-033-SA5B-SB-14.0-15.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-033-SA5B-SB-4.0-5.0(RES)	TIN	1.74 mg/Kg	1.74U mg/Kg
SL-033-SA5B-SB-9.0-10.0(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-151-SA5B-SB-4.0-5.0(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-151-SA5B-SB-7.0-8.0(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-152-SA5B-SB-4.0-5.0(RES)	TIN	2.32 mg/Kg	2.32U mg/Kg
SL-152-SA5B-SB-9.0-10.0(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-153-SA5B-SB-4.0-5.0(RES)	TIN	2.96 mg/Kg	2.96U mg/Kg
SL-154-SA5B-SB-4.0-5.0(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-155-SA5B-SB-3.5-4.5(RES)	TIN	3.07 mg/Kg	3.07U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02726AB220707A	2/7/2011 7:07:00 AM	LEAD	0.0138 mg/Kg	SL-032-SA5B-SB-14.0-15.0 SL-032-SA5B-SB-4.0-5.0 SL-032-SA5B-SB-9.0-10.0 SL-033-SA5B-SB-14.0-15.0 SL-033-SA5B-SB-4.0-5.0 SL-033-SA5B-SB-9.0-10.0 SL-151-SA5B-SB-4.0-5.0 SL-151-SA5B-SB-7.0-8.0 SL-152-SA5B-SB-4.0-5.0 SL-152-SA5B-SB-9.0-10.0 SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: DE067_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB59B212127A	1/27/2011 9:27:00 PM	METHYLENE CHLORIDE TOLUENE	0.57 ug/Kg 0.19 ug/Kg	SL-032-SA5B-SB-14.0-15.0 SL-032-SA5B-SB-4.0-5.0 SL-032-SA5B-SB-9.0-10.0 SL-033-SA5B-SB-14.0-15.0 SL-033-SA5B-SB-4.0-5.0 SL-033-SA5B-SB-9.0-10.0 SL-151-SA5B-SB-4.0-5.0 SL-152-SA5B-SB-4.0-5.0 SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5

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-032-SA5B-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	0.39 ug/Kg	3.4U ug/Kg
SL-032-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.0U ug/Kg
SL-032-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	4.0U ug/Kg
SL-032-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.49 ug/Kg	3.6U ug/Kg
SL-032-SA5B-SB-9.0-10.0(RES)	TOLUENE	0.08 ug/Kg	3.6U ug/Kg
SL-033-SA5B-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	0.54 ug/Kg	4.1U ug/Kg
SL-033-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	3.7U ug/Kg
SL-033-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.0U ug/Kg
SL-033-SA5B-SB-9.0-10.0(RES)	TOLUENE	0.10 ug/Kg	4.0U ug/Kg
SL-151-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	4.2U ug/Kg
SL-152-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	3.8U ug/Kg
SL-153-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	3.8U ug/Kg
SL-154-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.0U ug/Kg
SL-155-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.69 ug/Kg	4.5U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC03B262248	2/3/2011 10:48:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	SL-032-SA5B-SB-14.0-15.0 SL-032-SA5B-SB-4.0-5.0 SL-032-SA5B-SB-9.0-10.0 SL-033-SA5B-SB-14.0-15.0 SL-033-SA5B-SB-4.0-5.0 SL-033-SA5B-SB-9.0-10.0 SL-151-SA5B-SB-4.0-5.0 SL-151-SA5B-SB-7.0-8.0 SL-152-SA5B-SB-4.0-5.0 SL-152-SA5B-SB-9.0-10.0 SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: DE067_v1 eQAPP Name: CDM_SSFL_110509

Method: **8270C**
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-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	40 ug/Kg	370U ug/Kg
SL-152-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	390U ug/Kg
SL-152-SA5B-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	27 ug/Kg	390U ug/Kg
SL-154-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	380U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: DE067_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-032-SA5B-SB-4.0-5.0MSD (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -151-SA5B-SB-7.0-8.0 SL -152-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-9.0-10.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	CHROMIUM ZINC	- -	137 126	75.00-125.00 75.00-125.00	- -	CHROMIUM ZINC	J (all detects) Zn No Qual, >4x
SL-032-SA5B-SB-4.0-5.0MS SL-032-SA5B-SB-4.0-5.0MSD (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -151-SA5B-SB-7.0-8.0 SL -152-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-9.0-10.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	ANTIMONY ARSENIC LEAD VANADIUM	-187 -2970 -44 -105	-189 -2914 -23 -82	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ANTIMONY ARSENIC LEAD VANADIUM	J(all detects) UJ(all non-detects) As, V No Qual, >4x Sb Post Spike = 75% Pb Post Spike = 114%
SL-032-SA5B-SB-4.0-5.0MS SL-032-SA5B-SB-4.0-5.0MSD (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -151-SA5B-SB-7.0-8.0 SL -152-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-9.0-10.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	NICKEL THALLIUM	31 74	36 -	75.00-125.00 75.00-125.00	- -	NICKEL THALLIUM	J(all detects) UJ(all non-detects)
SL-032-SA5B-SB-4.0-5.0MSD (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -151-SA5B-SB-7.0-8.0 SL -152-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-9.0-10.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	BARIUM	-	161	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: DE067_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-032-SA5B-SB-4.0-5.0MS	ALUMINUM	2012	2556	75.00-125.00	-	ALUMINUM	
SL-032-SA5B-SB-4.0-5.0MSD	CALCIUM	558	-	75.00-125.00	-	CALCIUM	
(SL-032-SA5B-SB-14.0-15.0	IRON	3112	4337	75.00-125.00	-	IRON	J(all detects)
SL-032-SA5B-SB-4.0-5.0	MAGNESIUM	384	406	75.00-125.00	-	MAGNESIUM	
SL-032-SA5B-SB-9.0-10.0	MANGANESE	152	148	75.00-125.00	-	MANGANESE	Al, Ca, Fe,
SL-033-SA5B-SB-14.0-15.0	PHOSPHORUS	148	-	75.00-125.00	-	PHOSPHORUS	Mg, Mn, Ti
SL-033-SA5B-SB-4.0-5.0	POTASSIUM	164	-	75.00-125.00	-	POTASSIUM	No Qual, >4x
SL-033-SA5B-SB-9.0-10.0	TITANIUM	351	362	75.00-125.00	-	TITANIUM	
SL-151-SA5B-SB-4.0-5.0							
SL-151-SA5B-SB-7.0-8.0							
SL-152-SA5B-SB-4.0-5.0							
SL-152-SA5B-SB-9.0-10.0							
SL-153-SA5B-SB-4.0-5.0							
SL-154-SA5B-SB-4.0-5.0							
SL-155-SA5B-SB-3.5-4.5)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-032-SA5B-SB-4.0-5.0MS	2,4,5-TRICHLOROPHENOL	68	-	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	
(SL-032-SA5B-SB-4.0-5.0)	2,4,6-TRICHLOROPHENOL	64	-	77.00-115.00	-	2,4,6-TRICHLOROPHENOL	J(all detects)
	2,4-DICHLOROPHENOL	77	-	78.00-117.00	-	2,4-DICHLOROPHENOL	UJ(all non-detects)
	2-NITROPHENOL	61	-	74.00-115.00	-	2-NITROPHENOL	

Method: 314.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-153-SA5B-SB-4.0-5.0MS	PERCHLORATE	121	-	80.00-120.00	-	PERCHLORATE	
(SL-153-SA5B-SB-4.0-5.0							J(all detects)
SL-154-SA5B-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-033-SA5B-SB-4.0-5.0MSD	EFH (C21-C30)	-	31	49.00-123.00	40 (20.00)	EFH (C21-C30)	J(all detects)
(SL-033-SA5B-SB-4.0-5.0)	EFH (C30-C40)	-	2	49.00-123.00	31 (20.00)	EFH (C30-C40)	UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: DE067_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-153-SA5B-SB-4.0-5.0DUP (SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5)	FLUORIDE	21	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5B-SB-4.0-5.0DUP (SL-032-SA5B-SB-14.0-15.0 SL-032-SA5B-SB-4.0-5.0 SL-032-SA5B-SB-9.0-10.0 SL-033-SA5B-SB-14.0-15.0 SL-033-SA5B-SB-4.0-5.0 SL-033-SA5B-SB-9.0-10.0 SL-151-SA5B-SB-4.0-5.0 SL-151-SA5B-SB-7.0-8.0 SL-152-SA5B-SB-4.0-5.0 SL-152-SA5B-SB-9.0-10.0 SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5)	BORON	35	20.00	J(all detects) UJ(all non-detects) B, Zr No Qual OK by difference
	CALCIUM	27	20.00	
	IRON	21	20.00	
	POTASSIUM	24	20.00	
	TITANIUM	22	20.00	
	Zirconium	27	20.00	

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5B-SB-4.0-5.0DUP (SL-032-SA5B-SB-14.0-15.0 SL-032-SA5B-SB-4.0-5.0 SL-032-SA5B-SB-9.0-10.0 SL-033-SA5B-SB-14.0-15.0 SL-033-SA5B-SB-4.0-5.0 SL-033-SA5B-SB-9.0-10.0 SL-151-SA5B-SB-4.0-5.0 SL-151-SA5B-SB-7.0-8.0 SL-152-SA5B-SB-4.0-5.0 SL-152-SA5B-SB-9.0-10.0 SL-153-SA5B-SB-4.0-5.0 SL-154-SA5B-SB-4.0-5.0 SL-155-SA5B-SB-3.5-4.5)	ANTIMONY	3.0308	0.428 mg/Kg	J(all detects) UJ(all non-detects) Be, Cd, Se, Tl No Qual OK by difference
	ARSENIC	176	20.00	
	BERYLLIUM	23	20.00	
	CADMIUM	100	20.00	
	COBALT	29	20.00	
	LEAD	55	20.00	
	MOLYBDENUM	2.1690	0.214 mg/Kg	
	NICKEL	63	20.00	
	SELENIUM	138	20.00	
	THALLIUM	26	20.00	
	VANADIUM	53	20.00	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: DE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-032-SA5B-SB-4.0-5.0DUP (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -151-SA5B-SB-7.0-8.0 SL -152-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-9.0-10.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	MERCURY	58	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: DE067_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
P10311AQ241746A P10311AY241727A (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -151-SA5B-SB-7.0-8.0 SL -152-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-9.0-10.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	Aroclor 5442	74	64	75.00-125.00	-	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B59Q212236A (SL-032-SA5B-SB-14.0-15.0 SL -032-SA5B-SB-4.0-5.0 SL -032-SA5B-SB-9.0-10.0 SL -033-SA5B-SB-14.0-15.0 SL -033-SA5B-SB-4.0-5.0 SL -033-SA5B-SB-9.0-10.0 SL -151-SA5B-SB-4.0-5.0 SL -152-SA5B-SB-4.0-5.0 SL -153-SA5B-SB-4.0-5.0 SL -154-SA5B-SB-4.0-5.0 SL -155-SA5B-SB-3.5-4.5)	2-Chloro-1,1,1-trifluoroethane	73	-	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: DE067_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	N-NITROSODIMETHYLAMINE	J	20.5	37.6	PQL	ng/Kg	J (all detects)
SL-033-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	24.0	36.9	PQL	ng/Kg	J (all detects)
SL-154-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	20.9	37.9	PQL	ng/Kg	J (all detects)
SL-155-SA5B-SB-3.5-4.5	N-NITROSODIMETHYLAMINE	J	28.9	37.5	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-9.0-10.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-033-SA5B-SB-14.0-15.0	Nitrate-NO3	J	1.5	1.7	PQL	mg/Kg	J (all detects)
SL-033-SA5B-SB-9.0-10.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	BORON	J	2.88	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	11.0	PQL	mg/Kg	
	Zirconium	J	1.89	5.48	PQL	mg/Kg	
SL-032-SA5B-SB-4.0-5.0	TIN	J	2.47	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.41	5.56	PQL	mg/Kg	
SL-032-SA5B-SB-9.0-10.0	BORON	J	3.08	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.36	10.9	PQL	mg/Kg	
	Zirconium	J	2.22	5.44	PQL	mg/Kg	
SL-033-SA5B-SB-14.0-15.0	BORON	J	1.60	5.35	PQL	mg/Kg	J (all detects)
	TIN	J	2.41	10.7	PQL	mg/Kg	
	Zirconium	J	1.10	5.35	PQL	mg/Kg	
SL-033-SA5B-SB-4.0-5.0	BORON	J	1.51	5.42	PQL	mg/Kg	J (all detects)
	TIN	J	1.74	10.8	PQL	mg/Kg	
	Zirconium	J	1.96	5.42	PQL	mg/Kg	
SL-033-SA5B-SB-9.0-10.0	BORON	J	3.71	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	2.48	11.0	PQL	mg/Kg	
	Zirconium	J	1.83	5.48	PQL	mg/Kg	
SL-151-SA5B-SB-4.0-5.0	BORON	J	2.11	5.66	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	11.3	PQL	mg/Kg	
	Zirconium	J	2.43	5.66	PQL	mg/Kg	
SL-151-SA5B-SB-7.0-8.0	BORON	J	1.72	5.72	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	11.4	PQL	mg/Kg	
	Zirconium	J	2.27	5.72	PQL	mg/Kg	
SL-152-SA5B-SB-4.0-5.0	BORON	J	2.27	5.70	PQL	mg/Kg	J (all detects)
	TIN	J	2.32	11.4	PQL	mg/Kg	
	Zirconium	J	2.88	5.70	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: DE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-152-SA5B-SB-9.0-10.0	BORON	J	1.34	5.59	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.9	112	PQL	mg/Kg	
	TIN	J	2.92	11.2	PQL	mg/Kg	
	Zirconium	J	1.87	5.59	PQL	mg/Kg	
SL-153-SA5B-SB-4.0-5.0	TIN	J	2.96	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.40	5.42	PQL	mg/Kg	
SL-154-SA5B-SB-4.0-5.0	BORON	J	1.72	5.69	PQL	mg/Kg	J (all detects)
	TIN	J	2.62	11.4	PQL	mg/Kg	
	Zirconium	J	2.71	5.69	PQL	mg/Kg	
SL-155-SA5B-SB-3.5-4.5	BORON	J	1.06	5.47	PQL	mg/Kg	J (all detects)
	TIN	J	3.07	10.9	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	ANTIMONY	J	0.0872	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.107	0.112	PQL	mg/Kg	
	SELENIUM	J	0.0812	0.447	PQL	mg/Kg	
	SILVER	J	0.0443	0.112	PQL	mg/Kg	
SL-032-SA5B-SB-4.0-5.0	SILVER	J	0.0318	0.107	PQL	mg/Kg	J (all detects)
SL-032-SA5B-SB-9.0-10.0	ANTIMONY	J	0.127	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.107	0.440	PQL	mg/Kg	
	SILVER	J	0.0291	0.110	PQL	mg/Kg	
SL-033-SA5B-SB-14.0-15.0	ANTIMONY	J	0.0691	0.214	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0708	0.107	PQL	mg/Kg	
	SELENIUM	J	0.115	0.428	PQL	mg/Kg	
	SILVER	J	0.0370	0.107	PQL	mg/Kg	
SL-033-SA5B-SB-4.0-5.0	CADMIUM	J	0.0803	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0439	0.438	PQL	mg/Kg	
SL-033-SA5B-SB-9.0-10.0	ANTIMONY	J	0.101	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.112	0.443	PQL	mg/Kg	
	SILVER	J	0.0381	0.111	PQL	mg/Kg	
SL-151-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0713	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0687	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0857	0.444	PQL	mg/Kg	
	SILVER	J	0.0429	0.111	PQL	mg/Kg	
SL-151-SA5B-SB-7.0-8.0	ANTIMONY	J	0.0888	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0470	0.112	PQL	mg/Kg	
	SILVER	J	0.100	0.112	PQL	mg/Kg	
SL-152-SA5B-SB-4.0-5.0	ANTIMONY	J	0.100	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0602	0.114	PQL	mg/Kg	
	SELENIUM	J	0.117	0.456	PQL	mg/Kg	
	SILVER	J	0.0449	0.114	PQL	mg/Kg	
SL-152-SA5B-SB-9.0-10.0	ANTIMONY	J	0.155	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0787	0.114	PQL	mg/Kg	
	SELENIUM	J	0.0657	0.456	PQL	mg/Kg	
	SILVER	J	0.0824	0.114	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE067 **Laboratory: LL**

EDD Filename: DE067_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-153-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0958	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0863	0.425	PQL	mg/Kg	
	SILVER	J	0.0132	0.106	PQL	mg/Kg	
SL-154-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0876	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0521	0.446	PQL	mg/Kg	
	SILVER	J	0.0519	0.112	PQL	mg/Kg	
SL-155-SA5B-SB-3.5-4.5	ANTIMONY	J	0.145	0.221	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0702	0.110	PQL	mg/Kg	
	SELENIUM	J	0.148	0.442	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)
SL-032-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.88	1.1	PQL	mg/Kg	J (all detects)
SL-032-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SL-033-SA5B-SB-14.0-15.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-033-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-033-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-151-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.45	1.2	PQL	mg/Kg	J (all detects)
SL-151-SA5B-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)
SL-152-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.52	1.2	PQL	mg/Kg	J (all detects)
SL-152-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)
SL-153-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)
SL-154-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-155-SA5B-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.27	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	MERCURY	J	0.0044	0.111	PQL	mg/Kg	J (all detects)
SL-032-SA5B-SB-4.0-5.0	MERCURY	J	0.0147	0.108	PQL	mg/Kg	J (all detects)
SL-151-SA5B-SB-4.0-5.0	MERCURY	J	0.0124	0.114	PQL	mg/Kg	J (all detects)
SL-151-SA5B-SB-7.0-8.0	MERCURY	J	0.0055	0.113	PQL	mg/Kg	J (all detects)
SL-152-SA5B-SB-4.0-5.0	MERCURY	J	0.0063	0.115	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE067 **Laboratory:** LL

EDD Filename: DE067_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-152-SA5B-SB-9.0-10.0	MERCURY	J	0.0051	0.113	PQL	mg/Kg	J (all detects)
SL-154-SA5B-SB-4.0-5.0	MERCURY	J	0.0072	0.111	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	METHANOL	J	420	560	PQL	ug/Kg	J (all detects)
SL-033-SA5B-SB-4.0-5.0	METHANOL	J	120	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	EFH (C30-C40)	J	0.77	1.4	PQL	mg/Kg	J (all detects)
SL-032-SA5B-SB-9.0-10.0	EFH (C15-C20)	J	0.77	1.3	PQL	mg/Kg	J (all detects)
SL-033-SA5B-SB-9.0-10.0	EFH (C12-C14)	J	0.50	1.3	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-033-SA5B-SB-14.0-15.0	AROCLOR 1254	J	0.99	1.9	PQL	ug/Kg	J (all detects)
SL-033-SA5B-SB-9.0-10.0	AROCLOR 1254 AROCLOR 1260	J J	1.3 0.78	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	1.5 0.39	6.8 3.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-032-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.08	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-032-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	0.49 0.08	3.6 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-033-SA5B-SB-14.0-15.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	2.8 0.54	8.1 4.1	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE067 | Laboratory: LL

EDD Filename: DE067_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-033-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.41	3.7	PQL	ug/Kg	J (all detects)
SL-033-SA5B-SB-9.0-10.0	1,2-Dibromoethane (EDB)	J	0.42	4.0	PQL	ug/Kg	J (all detects)
	BENZENE	J	0.10	4.0	PQL	ug/Kg	
	ETHYLBENZENE	J	0.29	4.0	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	1.8	4.0	PQL	ug/Kg	
	N-PROPYLBENZENE	J	0.09	4.0	PQL	ug/Kg	
	O-XYLENE	J	0.20	4.0	PQL	ug/Kg	
	P-ISOPROPYLTOLUENE	J	0.18	4.0	PQL	ug/Kg	
	SEC-BUTYLBENZENE	J	0.08	4.0	PQL	ug/Kg	
	TOLUENE	J	0.10	4.0	PQL	ug/Kg	
SL-151-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.48	4.2	PQL	ug/Kg	J (all detects)
SL-152-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.50	3.8	PQL	ug/Kg	J (all detects)
SL-153-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.43	3.8	PQL	ug/Kg	J (all detects)
SL-154-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.43	4.0	PQL	ug/Kg	J (all detects)
SL-155-SA5B-SB-3.5-4.5	METHYLENE CHLORIDE	J	0.69	4.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	370	PQL	ug/Kg	J (all detects)
SL-152-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	390	PQL	ug/Kg	J (all detects)
SL-152-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	390	PQL	ug/Kg	J (all detects)
SL-154-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SB-14.0-15.0	BENZO(B)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.2	20	PQL	ug/Kg	
SL-032-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.43	1.9	PQL	ug/Kg	
SL-032-SA5B-SB-9.0-10.0	CHRYSENE	J	0.46	1.8	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-033-SA5B-SB-14.0-15.0	1-METHYLNAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.4	20	PQL	ug/Kg	
	CHRYSENE	J	0.44	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.88	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE067 Laboratory: LL

EDD Filename: DE067_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-033-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.92	1.8	PQL	ug/Kg	
SL-033-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.66	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.95	1.9	PQL	ug/Kg	
	FLUORENE	J	1.5	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.9	PQL	ug/Kg	
	PYRENE	J	0.89	1.9	PQL	ug/Kg	
SL-151-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	21	PQL	ug/Kg	J (all detects)
SL-151-SA5B-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.0	21	PQL	ug/Kg	J (all detects)
SL-153-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	J (all detects)
SL-155-SA5B-SB-3.5-4.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	20	PQL	ug/Kg	J (all detects)

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-033-SA5B-SB-9.0-10.0	FORMALDEHYDE	J	16000	17000	PQL	ug/Kg	J (all detects)

LDC #: 25750R4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/4/1

SDG #: DE067 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	Fe.
VI.	Matrix Spike Analysis	N	MS/D (Al, As, Ba, Ca, Mg, Mn, Ti, V, Zn >4X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Cd, Hg, Mo, Se, Tl, Zr, Be <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS Be (Sb, Mo outlog difference)
IX.	Internal Standard (ICP-MS)	N	3.038(≤0.428) 2.169(≤0.214)
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ (V: 12%)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-032-SA5B-SB-4.0-5.0	11	SL-153-SA5B-SB-4.0-5.0	21		31	
2	SL-032-SA5B-SB-9.0-10.0	12	SL-154-SA5B-SB-4.0-5.0	22		32	
3	SL-032-SA5B-SB-14.0-15.0	13	SL-155-SA5B-SB-3.5-4.5	23		33	
4	SL-033-SA5B-SB-4.0-5.0	14	(#1) MS	24		34	
5	SL-033-SA5B-SB-9.0-10.0	15	MSD	25		35	
6	SL-033-SA5B-SB-14.0-15.0	16	DUP	26		36	
7	SL-151-SA5B-SB-4.0-5.0	17		27		37	
8	SL-151-SA5B-SB-7.0-8.0	18		28		38	
9	SL-152-SA5B-SB-4.0-5.0	19		29		39	
10	SL-152-SA5B-SB-9.0-10.0	20		30		40	

Notes:

LDC #: 25750R 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: GC
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2													
Zr			5.0	2.5	2.4	2.2													

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 3-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	3	4	5	6	7	8	10	11								
Zr			5.1	2.55	1.9	2.0	1.8	1.1	2.4	2.3	1.9	1.4								

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 13

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Quals														
Zr			5.6	2.8															

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	2	3	5	6	7	8	9	10	11	12	13					
Sb			0.36	0.36	0.13	0.087	0.10	0.069	0.071	0.089	0.10	0.15	0.096	0.088	0.14					

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.

SAMPLE DELIVERY GROUP

DE068

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
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3050B	6010B	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3050B	6020	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3060A	7199	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3546	1625C	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3550B	8015B	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3550B	8015M	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3550B	8082	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3550B	8270C	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	3550B	8270C SIM	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	5035	8015M	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	5035	8260B	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	5035	8260B SIM	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	8330	8330A	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	Gen Prep	9045M	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	300.0	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	314.0	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	7471A	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	8015B	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	8015M	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	8315A	III
25-Jan-2011	SL-156-SA5B-SB-4.0-5.0	6191429	N	METHOD	9012B	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3050B	6010B	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3050B	6020	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3060A	7199	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3546	1625C	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	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
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3550B	8015M	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3550B	8082	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3550B	8270C	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	3550B	8270C SIM	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	5035	8015M	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	5035	8260B	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	5035	8260B SIM	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	8330	8330A	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	Gen Prep	9045M	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	300.0	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	314.0	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	7471A	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	8015B	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	8015M	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	8315A	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0	6191426	N	METHOD	9012B	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0DUP	P191426D291100A	DUP	Gen Prep	9045M	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0MSD	P191426M240147A	MSD	3550B	8082	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0MSD	P191426M260007	MSD	3550B	8270C SIM	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0MS	P191426R240129A	MS	3550B	8082	III
25-Jan-2011	SL-148-SA5B-SB-4.0-5.0MS	P191426R262336	MS	3550B	8270C SIM	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	3050B	6010B	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	3050B	6020	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	3060A	7199	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	3550B	8082	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	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
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	3550B	8270C SIM	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	5035	8260B	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	5035	8260B SIM	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	Gen Prep	9045M	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	METHOD	300.0	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	METHOD	314.0	III
25-Jan-2011	SL-149-SA5B-SB-3.5-4.5	6191427	N	METHOD	7471A	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	3050B	6010B	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	3050B	6020	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	3060A	7199	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	3550B	8082	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	3550B	8270C	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	3550B	8270C SIM	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	5035	8260B	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	5035	8260B SIM	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	Gen Prep	9045M	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	METHOD	300.0	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	METHOD	314.0	III
25-Jan-2011	SL-150-SA5B-SB-4.0-5.0	6191428	N	METHOD	7471A	III
25-Jan-2011	TB-012511	6191430	TB	5030B	8015M	III
25-Jan-2011	TB-012511	6191430	TB	5030B	8260B	III
25-Jan-2011	TB-012511	6191430	TB	5030B	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: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.16	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
CALCIUM	1950		6.88	MDL	22.4	PQL	mg/Kg	J	E
IRON	18900		5.28	MDL	22.4	PQL	mg/Kg	J	E
PHOSPHORUS	98.8		0.628	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	990		20.2	MDL	56.1	PQL	mg/Kg	J	Q, E
TIN	2.28	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1190		0.426	MDL	1.12	PQL	mg/Kg	J	E
Zirconium	1.12	J	0.942	MDL	5.61	PQL	mg/Kg	U	B

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2210		6.49	MDL	21.2	PQL	mg/Kg	J	E
IRON	20000		4.99	MDL	21.2	PQL	mg/Kg	J	E
PHOSPHORUS	283		0.593	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1960		19.1	MDL	53.0	PQL	mg/Kg	J	Q, E
TIN	2.50	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
TITANIUM	1160		0.403	MDL	1.06	PQL	mg/Kg	J	E
Zirconium	0.988	J	0.890	MDL	5.30	PQL	mg/Kg	U	B

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.93	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z
CALCIUM	2260		6.71	MDL	21.9	PQL	mg/Kg	J	E
IRON	26400		5.16	MDL	21.9	PQL	mg/Kg	J	E
PHOSPHORUS	194		0.613	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1500		19.7	MDL	54.7	PQL	mg/Kg	J	Q, E
TIN	2.16	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
TITANIUM	1070		0.416	MDL	1.09	PQL	mg/Kg	J	E
Zirconium	1.83	J	0.919	MDL	5.47	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.77	J	0.988	MDL	5.55	PQL	mg/Kg	J	Z
CALCIUM	2610		6.81	MDL	22.2	PQL	mg/Kg	J	E
IRON	22200		5.23	MDL	22.2	PQL	mg/Kg	J	E
PHOSPHORUS	397		0.622	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	1400		20.0	MDL	55.5	PQL	mg/Kg	J	Q, E
TIN	2.31	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
TITANIUM	1010		0.422	MDL	1.11	PQL	mg/Kg	J	E
Zirconium	2.79	J	0.933	MDL	5.55	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	8.25		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0515	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.294		0.0566	MDL	0.113	PQL	mg/Kg	J	E

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0914	J	0.0680	MDL	0.227	PQL	mg/Kg	UJ	B, Q, E
ARSENIC	5.68		0.0906	MDL	0.453	PQL	mg/Kg	J	E
CADMIUM	0.0476	J	0.0453	MDL	0.113	PQL	mg/Kg	J	Z
CHROMIUM	15.3		0.136	MDL	0.453	PQL	mg/Kg	J	Q
COBALT	3.40		0.0227	MDL	0.113	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 **Laboratory:** LL

EDD Filename: PrepDE068_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	4.49		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E
SILVER	0.0194	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.210		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	35.4		0.0249	MDL	0.113	PQL	mg/Kg	J	A, E

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	9.35		0.104	MDL	0.415	PQL	mg/Kg	J	Q, E

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0567	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.278		0.0519	MDL	0.104	PQL	mg/Kg	J	E

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0623	U	0.0623	MDL	0.208	PQL	mg/Kg	UJ	Q, E
ARSENIC	6.73		0.0831	MDL	0.415	PQL	mg/Kg	J	E
CADMIUM	0.0603	J	0.0415	MDL	0.104	PQL	mg/Kg	J	Z
CHROMIUM	14.3		0.125	MDL	0.415	PQL	mg/Kg	J	Q
COBALT	5.49		0.0208	MDL	0.104	PQL	mg/Kg	J	E
LEAD	3.68		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E
THALLIUM	0.226		0.0312	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	30.7		0.0228	MDL	0.104	PQL	mg/Kg	J	A, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 **Laboratory: LL**

EDD Filename: PrepDE068_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	12.3		0.111	MDL	0.442	PQL	mg/Kg	J	Q, E

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.424		0.0553	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0854	J	0.0663	MDL	0.221	PQL	mg/Kg	UJ	B, Q, E
ARSENIC	4.93		0.0884	MDL	0.442	PQL	mg/Kg	J	E
CADMIUM	0.0694	J	0.0442	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	18.2		0.133	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	4.07		0.0221	MDL	0.111	PQL	mg/Kg	J	E
LEAD	4.93		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E
SILVER	0.0488	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.199		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	34.7		0.0243	MDL	0.111	PQL	mg/Kg	J	A, E

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	11.4		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0950	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.274		0.0555	MDL	0.111	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0871	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	B, Q, E
ARSENIC	7.16		0.0888	MDL	0.444	PQL	mg/Kg	J	E
CHROMIUM	20.3		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	5.05		0.0222	MDL	0.111	PQL	mg/Kg	J	E
LEAD	7.53		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
SILVER	0.0184	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.243		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	34.8		0.0244	MDL	0.111	PQL	mg/Kg	J	A, E

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

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

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

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *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	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0121	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

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

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *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	31.5	J	19.1	MDL	38.1	PQL	ng/Kg	J	Z

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

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *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)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *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)	0.96	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 Matrix: SO

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *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	22	J	19	MDL	380	PQL	ug/Kg	U	B

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *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	22	J	18	MDL	350	PQL	ug/Kg	U	B

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *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	21	J	19	MDL	380	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *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	19	J	19	MDL	380	PQL	ug/Kg	U	B

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

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	16	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *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(B)FLUORANTHENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.83	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.8	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	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitroglycerin	1200	J	910	MDL	2700	PQL	ug/Kg	J	Z

Method Category: VOA **Method:** 8260B **Matrix:** SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.50	U	0.50	MDL	4.9	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: PrepDE068_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-148-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 11:29:00 *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	0.43	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-149-SA5B-SB-3.5-4.5 *Collected:* 1/25/2011 2:04:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.51	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-150-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 3:16:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.53	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-156-SA5B-SB-4.0-5.0 *Collected:* 1/25/2011 9:27:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.53	U	0.53	MDL	5.3	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.57	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE068 **Laboratory: LL**

EDD Filename: PrepDE068_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE068 **Laboratory: LL**

EDD Filename: PrepDE068_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE068 **Laboratory: LL**

EDD Filename: PrepDE068_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE068

Method Blank Outlier Report

Lab Reporting Batch ID: DE068 **Laboratory: LL**

EDD Filename: DE068_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02708AB221212	1/31/2011 12:12:00 PM	CALCIUM PHOSPHORUS TIN	9.22 mg/Kg 1.07 mg/Kg 1.43 mg/Kg	SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-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-148-SA5B-SB-4.0-5.0(RES)	TIN	2.28 mg/Kg	2.28U mg/Kg
SL-149-SA5B-SB-3.5-4.5(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-150-SA5B-SB-4.0-5.0(RES)	TIN	2.16 mg/Kg	2.16U mg/Kg
SL-156-SA5B-SB-4.0-5.0(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02726AB220707A	2/7/2011 7:07:00 AM	LEAD	0.0138 mg/Kg	SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB59B212127A	1/27/2011 9:27:00 PM	METHYLENE CHLORIDE TOLUENE	0.57 ug/Kg 0.19 ug/Kg	SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-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-148-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.0U ug/Kg
SL-149-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	4.2U ug/Kg
SL-150-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.53 ug/Kg	4.1U ug/Kg
SL-156-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.3U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE068 **Laboratory:** LL

EDD Filename: DE068_v1 **eQAPP Name:** CDM_SSFL_110509

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD03B262212	2/4/2011 10:12:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-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-148-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	380U ug/Kg
SL-149-SA5B-SB-3.5-4.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	350U ug/Kg
SL-150-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	380U ug/Kg
SL-156-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	380U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: DE068_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-148-SA5B-SB-4.0-5.0MS SL-148-SA5B-SB-4.0-5.0MSD (SL-148-SA5B-SB-4.0-5.0)	ACENAPHTHENE N-NITROSODIMETHYLAMINE	109 118	107 -	63.00-105.00 48.00-113.00	- -	ACENAPHTHENE N-NITROSODIMETHYLAMINE	J (all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE068 Laboratory: LL

EDD Filename: DE068_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LALCSQ262056 (SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-SB-4.0-5.0)	1-METHYLNAPHTHALENE	121	-	72.00-120.00	-	1-METHYLNAPHTHALENE	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10312AQ240052A P10312AY240033A (SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-SB-4.0-5.0)	Aroclor 5442	57	62	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B59Q212236A (SL-148-SA5B-SB-4.0-5.0 SL-149-SA5B-SB-3.5-4.5 SL-150-SA5B-SB-4.0-5.0 SL-156-SA5B-SB-4.0-5.0)	2-Chloro-1,1,1-trifluoroethane	73	-	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

LDC #: 25750S4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/4/11
SDG #: DE068 ADR
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE067)
VII.	Duplicate Sample Analysis	N	Dup ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	SDG: DE067 (V: 12% J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	/	

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-148-SA5B-SB-4.0-5.0	11		21		31	
2	SL-149-SA5B-SB-3.5-4.5	12		22		32	
3	SL-150-SA5B-SB-4.0-5.0	13		23		33	
4	SL-156-SA5B-SB-4.0-5.0	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:

LDC #: 25750S 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4												
Sb	.		0.36	0.36	0.091		0.085	0.087												
Zr			5.6	2.8	1.1	0.99	1.8	2.8												

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.

SAMPLE DELIVERY GROUP

DE069

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
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	3050B	6010B	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	3050B	6020	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	3060A	7199	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	3550B	8082	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	3550B	8270C	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	3550B	8270C SIM	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	5035	8260B	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	5035	8260B SIM	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	Gen Prep	9045M	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	METHOD	300.0	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	METHOD	314.0	III
26-Jan-2011	SL-263-SA5B-SB-2.0-3.0	6192764	N	METHOD	7471A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3050B	6010B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3060A	7199	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3546	1625C	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3550B	8015B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3550B	8015M	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3550B	8082	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3550B	8270C	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	3550B	8270C SIM	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	5035	8015M	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	5035	8260B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	5035	8260B SIM	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	8330	8330A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	Gen Prep	9045M	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
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	300.0	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	314.0	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	7471A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	8015B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	8015M	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	8315A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0	6192759	N	METHOD	9012B	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3050B	6010B	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3060A	7199	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3546	1625C	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3550B	8015B	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3550B	8015M	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3550B	8082	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3550B	8270C	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	3550B	8270C SIM	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	5035	8015M	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	5035	8260B	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	5035	8260B SIM	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	8330	8330A	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	Gen Prep	9045M	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	300.0	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	314.0	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	6850	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	7471A	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	8015B	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	8015M	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	8315A	III
26-Jan-2011	SL-018-SA5B-SB-9.0-10.0	6192760	N	METHOD	9012B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D221058A	DUP	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D221058B	DUP	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D221058C	DUP	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D221058D	DUP	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D221528A	DUP	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D221944	DUP	METHOD	7471A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0DUP	P192759D222119	DUP	3050B	6010B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M221104A	MSD	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M221104B	MSD	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M221104C	MSD	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M221104D	MSD	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M221532A	MSD	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M221949	MSD	METHOD	7471A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MSD	P192759M222127	MSD	3050B	6010B	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R221101A	MS	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R221101B	MS	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R221101C	MS	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R221101D	MS	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R221530A	MS	3050B	6020	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R221948	MS	METHOD	7471A	III
26-Jan-2011	SL-018-SA5B-SB-4.0-5.0MS	P192759R222123	MS	3050B	6010B	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	3050B	6010B	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	3050B	6020	III

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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
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	3060A	7199	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	3550B	8082	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	3550B	8270C	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	3550B	8270C SIM	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	5035	8260B	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	5035	8260B SIM	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	Gen Prep	9045M	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	METHOD	300.0	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	METHOD	314.0	III
26-Jan-2011	SL-262-SA5B-SB-4.0-5.0	6192763	N	METHOD	7471A	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	3005A	6010B	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	3020A	6020	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	3510C	8082	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	3510C	8270C SIM	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	5030B	8260B	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	5030B	8260B SIM	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	Gen Prep	300.0	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	Gen Prep	314.0	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	Gen Prep	7199	III
26-Jan-2011	EB26-SA5B-012611	6192765	EB	METHOD	7470A	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3050B	6010B	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3050B	6020	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3060A	7199	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3546	1625C	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3550B	8015B	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3550B	8015M	III

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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
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3550B	8082	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3550B	8270C	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	3550B	8270C SIM	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	5035	8015M	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	5035	8260B	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	5035	8260B SIM	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	8330	8330A	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	Gen Prep	9045M	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	300.0	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	314.0	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	7471A	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	8015B	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	8015M	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	8315A	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0	6192757	N	METHOD	9012B	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0MSD	P192757M261317	MSD	3546	1625C	III
26-Jan-2011	SL-016-SA5B-SB-4.0-5.0MS	P192757R261301	MS	3546	1625C	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3050B	6010B	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3050B	6020	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3060A	7199	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3546	1625C	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3550B	8015B	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3550B	8015M	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3550B	8082	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3550B	8270C	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	3550B	8270C SIM	III

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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
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	5035	8015M	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	5035	8260B	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	5035	8260B SIM	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	8330	8330A	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	Gen Prep	9045M	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	300.0	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	314.0	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	7471A	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	8015B	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	8015M	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	8315A	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0	6192758	N	METHOD	9012B	III
26-Jan-2011	SL-016-SA5B-SB-9.0-10.0MS	P192758R212100A	MS	5035	8260B	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3050B	6010B	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3050B	6020	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3060A	7199	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3546	1625C	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3550B	8015B	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3550B	8015M	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3550B	8082	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3550B	8270C	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	3550B	8270C SIM	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	5035	8015M	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	5035	8260B	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	5035	8260B SIM	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	8330	8330A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	Gen Prep	9045M	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	300.0	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	314.0	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	7471A	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	8015B	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	8015M	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	8315A	III
26-Jan-2011	SL-180-SA5B-SB-9.0-10.0	6192762	N	METHOD	9012B	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3050B	6010B	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3050B	6020	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3060A	7199	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3546	1625C	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3550B	8015B	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3550B	8015M	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3550B	8082	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3550B	8270C	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	3550B	8270C SIM	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	5035	8015M	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	5035	8260B	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	5035	8260B SIM	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	8330	8330A	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	Gen Prep	9045M	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	METHOD	300.0	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	METHOD	314.0	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	METHOD	7471A	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	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
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	METHOD	8015M	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	METHOD	8315A	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0	6192761	N	METHOD	9012B	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0DUP	P192761D291100B	DUP	Gen Prep	9045M	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0MSD	P192761M320324A	MSD	METHOD	8015B	III
26-Jan-2011	SL-180-SA5B-SB-4.0-5.0MS	P192761R320309A	MS	METHOD	8015B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3050B	6010B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3050B	6020	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3060A	7199	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3546	1625C	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3550B	8015B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3550B	8015M	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3550B	8082	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3550B	8270C	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	3550B	8270C SIM	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	5035	8015M	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	5035	8260B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	5035	8260B SIM	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	8330	8330A	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	Gen Prep	9045M	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	METHOD	300.0	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	METHOD	314.0	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	METHOD	7471A	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	METHOD	8015B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	METHOD	8015M	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	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
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0	6192756	N	METHOD	9012B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0DUP	P192756D222336	DUP	3050B	6010B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0DUP	P192756D271043A	DUP	METHOD	314.0	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0DUP	P192756D271501A	DUP	METHOD	300.0	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0DUP	P192756D271701A	DUP	METHOD	9012B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0DUP	P192756D271722A	DUP	3060A	7199	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MSD	P192756M222344	MSD	3050B	6010B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MSD	P192756M240642A	MSD	8330	8330A	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MSD	P192756M242020A	MSD	METHOD	8315A	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MSD	P192756M262354	MSD	3550B	8270C	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MSD	P192756M320619A	MSD	3550B	8015M	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R222340	MS	3050B	6010B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R240559A	MS	8330	8330A	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R242010A	MS	METHOD	8315A	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R262329	MS	3550B	8270C	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R271106A	MS	METHOD	314.0	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R271517A	MS	METHOD	300.0	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R271638A	MS	3060A	7199	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R271702A	MS	METHOD	9012B	III
26-Jan-2011	SL-015-SA5B-SB-4.0-5.0MS	P192756R320554A	MS	3550B	8015M	III
26-Jan-2011	TB-012611	6192766	TB	5030B	8015M	III
26-Jan-2011	TB-012611	6192766	TB	5030B	8260B	III
26-Jan-2011	TB-012611	6192766	TB	5030B	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: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
FLUORIDE	0.95	J	0.88	MDL	1.1	PQL	mg/Kg	J	Z
Nitrate-NO3	1.1	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 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
FLUORIDE	1.1	J	0.93	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
Nitrate-NO3	1.3	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

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

Method Category: METALS

Method: 6010B Matrix: SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.99	J	1.00	MDL	5.64	PQL	mg/Kg	J	Z
TIN	2.58	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.53	J	0.947	MDL	5.64	PQL	mg/Kg	U	B

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.22	J	0.997	MDL	5.60	PQL	mg/Kg	J	Z
TIN	3.04	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.57	J	0.941	MDL	5.60	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
BORON	2.82	J	0.982	MDL	5.52	PQL	mg/Kg	J	Z
TIN	2.58	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.62	J	0.927	MDL	5.52	PQL	mg/Kg	U	B

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 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
BORON	4.02	J	1.02	MDL	5.74	PQL	mg/Kg	J	Z
TIN	2.43	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.66	J	0.965	MDL	5.74	PQL	mg/Kg	U	B

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
TIN	3.45	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.33	J	0.980	MDL	5.51	PQL	mg/Kg	J	Z
TIN	2.75	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.35	J	0.925	MDL	5.51	PQL	mg/Kg	U	B

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.33	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.44	J	0.954	MDL	5.68	PQL	mg/Kg	U	B

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.08	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.37	J	0.959	MDL	5.71	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 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
BORON	1.29	J	0.980	MDL	5.51	PQL	mg/Kg	J	Z
SODIUM	107	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.46	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.925	MDL	5.51	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.283	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0670	U	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q
CHROMIUM	16.0		0.134	MDL	0.447	PQL	mg/Kg	J	A
COPPER	7.97		0.0737	MDL	0.447	PQL	mg/Kg	J	A
SILVER	0.0311	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0686	U	0.0686	MDL	0.229	PQL	mg/Kg	UJ	Q
CHROMIUM	22.4		0.137	MDL	0.457	PQL	mg/Kg	J	A
COPPER	9.79		0.0754	MDL	0.457	PQL	mg/Kg	J	A
SILVER	0.0324	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-016-SA5B-SB-9.0-10.0 ***Collected:*** 1/26/2011 2:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0643	U	0.0643	MDL	0.214	PQL	mg/Kg	UJ	Q
CHROMIUM	16.3		0.129	MDL	0.429	PQL	mg/Kg	J	A
COPPER	7.75		0.0707	MDL	0.429	PQL	mg/Kg	J	A
SILVER	0.0487	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-4.0-5.0 ***Collected:*** 1/26/2011 11:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.176	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-4.0-5.0 ***Collected:*** 1/26/2011 11:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0711	J	0.0689	MDL	0.230	PQL	mg/Kg	UJ	Q, B
CHROMIUM	15.6		0.138	MDL	0.459	PQL	mg/Kg	J	A
COPPER	8.48		0.0758	MDL	0.459	PQL	mg/Kg	J	A
SILVER	0.0305	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-9.0-10.0 ***Collected:*** 1/26/2011 11:20:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.226	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-9.0-10.0 ***Collected:*** 1/26/2011 11:20:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0667	U	0.0667	MDL	0.222	PQL	mg/Kg	UJ	Q
CADMIUM	0.0773	J	0.0444	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	14.4		0.133	MDL	0.444	PQL	mg/Kg	J	A
COPPER	9.31		0.0733	MDL	0.444	PQL	mg/Kg	J	A
SILVER	0.0429	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0674	U	0.0674	MDL	0.225	PQL	mg/Kg	UJ	Q
CADMIUM	0.0822	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	22.1		0.135	MDL	0.449	PQL	mg/Kg	J	A
COPPER	8.59		0.0741	MDL	0.449	PQL	mg/Kg	J	A
SILVER	0.0391	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0668	U	0.0668	MDL	0.223	PQL	mg/Kg	UJ	Q
CHROMIUM	39.4		0.134	MDL	0.445	PQL	mg/Kg	J	A
COPPER	21.1		0.0735	MDL	0.445	PQL	mg/Kg	J	A

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.403	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0685	U	0.0685	MDL	0.228	PQL	mg/Kg	UJ	Q
CHROMIUM	31.3		0.137	MDL	0.457	PQL	mg/Kg	J	A
COPPER	11.7		0.0753	MDL	0.457	PQL	mg/Kg	J	A
SILVER	0.0300	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 9:14:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 9:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0642	U	0.0642	MDL	0.214	PQL	mg/Kg	UJ	Q
CADMIUM	0.0834	J	0.0428	MDL	0.107	PQL	mg/Kg	J	Z
CHROMIUM	28.0		0.128	MDL	0.428	PQL	mg/Kg	J	A
COPPER	9.83		0.0706	MDL	0.428	PQL	mg/Kg	J	A
SILVER	0.0454	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *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	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
HEXAVALENT CHROMIUM	0.29	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 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
HEXAVALENT CHROMIUM	0.32	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.25	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 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
HEXAVALENT CHROMIUM	0.23	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0128	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0239	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
MERCURY	0.0117	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 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
MERCURY	0.0042	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
MERCURY	0.0067	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0034	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0265	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0073	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 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
MERCURY	0.0078	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M Matrix: AQ

Sample ID: TB-012611 *Collected:* 1/26/2011 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
GASOLINE RANGE ORGANICS (C5-C12)	20	U	20	MDL	50	PQL	ug/L	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8015M Matrix: SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *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)	0.58	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, Q, Q

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *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)	0.95	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:14:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.0	J	2.2	MDL	6.6	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:20:00 *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)	0.82	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 11:20:00 *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)	0.54	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.93	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *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)	1.3	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 Matrix: AQ

Sample ID: EB26-SA5B-012611 *Collected:* 1/26/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: EB26-SA5B-012611 *Collected:* 1/26/2011 1:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5442	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	L
Aroclor 5460	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *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 1254	0.91	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z
AROCLOR 1260	0.47	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	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *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 1254	0.90	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:14:00 *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 1254	0.89	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.2	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *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	390	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:14:00 *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	40	J	18	MDL	370	PQL	ug/Kg	J	Z
PHENOL	19	J	18	MDL	180	PQL	ug/Kg	J	Z, L

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *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	20	J	19	MDL	380	PQL	ug/Kg	U	B

Method Category: SVOA **Method:** 8270C SIM **Matrix:** AQ

Sample ID: EB26-SA5B-012611 *Collected:* 1/26/2011 1:00:00 *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	0.12	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Diethylphthalate	0.15	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.52	J	0.050	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.020	J	0.010	MDL	0.050	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.010	U	0.010	MDL	0.050	PQL	ug/L	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-015-SA5B-SB-4.0-5.0 ***Collected:*** 1/26/2011 4:02:00 ***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	0.56	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.90	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5B-SB-4.0-5.0 ***Collected:*** 1/26/2011 2:04:00 ***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	0.97	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.82	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Diethylphthalate	19	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5B-SB-9.0-10.0 ***Collected:*** 1/26/2011 2:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.75	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	0.75	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.84	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5B-SB-4.0-5.0 ***Collected:*** 1/26/2011 11:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	15	J	7.0	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-018-SA5B-SB-9.0-10.0 ***Collected:*** 1/26/2011 11:20:00 ***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	10	J	6.7	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	18	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *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	0.87	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 9:14:00 *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	17	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix:** SO

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
FORMALDEHYDE	1400	J	670	MDL	1700	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	120	J	110	MDL	570	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:14:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	240	J	110	MDL	550	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: PrepDE069_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 11:20:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	130	J	110	MDL	560	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-015-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 4:02:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.49	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 2:04:00 *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	0.58	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:14:00 *Analysis Type:* RES *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.2		6.4	MDL	7.7	PQL	ug/Kg	U	F
BENZENE	0.1	J	0.1	MDL	3.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.42	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:20:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,1,2-TETRACHLOROETHANE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,1-TRICHLOROETHANE	0.20	U	0.20	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,2,2-TETRACHLOROETHANE	0.23	U	0.23	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
1,1,2-TRICHLOROETHANE	0.27	U	0.27	MDL	4.1	PQL	ug/Kg	UJ	S
1,1-DICHLOROETHANE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
1,1-DICHLOROETHENE	0.40	U	0.40	MDL	4.1	PQL	ug/Kg	UJ	S
1,1-DICHLOROPROPENE	0.13	U	0.13	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,3-TRICHLOROBENZENE	0.14	U	0.14	MDL	4.1	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:20:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3-TRICHLOROPROPANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	S
1,2,4-TRIMETHYLBENZENE	0.41	U	0.41	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DIBROMO-3-CHLOROPROPANE	0.71	U	0.71	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-Dibromoethane (EDB)	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DICHLOROBENZENE	0.09	U	0.09	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DICHLOROETHANE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
1,2-DICHLOROPROPANE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
1,3,5-TRIMETHYLBENZENE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
1,3-DICHLOROBENZENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
1,3-DICHLOROPROPANE	0.08	U	0.08	MDL	4.1	PQL	ug/Kg	UJ	S
1,4-DICHLOROBENZENE	0.16	U	0.16	MDL	4.1	PQL	ug/Kg	UJ	S
2,2-DICHLOROPROPANE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
2-BUTANONE (MEK)	1.2	U	1.2	MDL	8.1	PQL	ug/Kg	UJ	S
2-Chloro-1,1,1-trifluoroethane	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	S
2-CHLOROETHYL VINYL ETHER	0.31	U	0.31	MDL	4.1	PQL	ug/Kg	UJ	S
2-CHLOROTOLUENE	0.14	U	0.14	MDL	4.1	PQL	ug/Kg	UJ	S
2-HEXANONE	1.6	U	1.6	MDL	8.1	PQL	ug/Kg	UJ	S
4-CHLOROTOLUENE	0.14	U	0.14	MDL	4.1	PQL	ug/Kg	UJ	S
4-METHYL-2-PENTANONE (MIBK)	0.40	U	0.40	MDL	8.1	PQL	ug/Kg	UJ	S
ACETONE	6.8	U	6.8	MDL	8.1	PQL	ug/Kg	UJ	S
BENZENE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOBENZENE	0.13	U	0.13	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOCHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	S
BROMODICHLOROMETHANE	0.08	U	0.08	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOFORM	0.41	U	0.41	MDL	4.1	PQL	ug/Kg	UJ	S
BROMOMETHANE	0.25	U	0.25	MDL	4.1	PQL	ug/Kg	UJ	S
CARBON TETRACHLORIDE	0.14	U	0.14	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROBENZENE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROETHANE	0.13	U	0.13	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROFORM	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
CHLOROMETHANE	0.34	U	0.34	MDL	4.1	PQL	ug/Kg	UJ	S
Chlorotrifluoroethylene	0.51	U	0.51	MDL	5.1	PQL	ug/Kg	UJ	S
CIS-1,2-DICHLOROETHENE	0.19	U	0.19	MDL	4.1	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-018-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:20:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.1	PQL	ug/Kg	UJ	S
DIBROMOCHLOROMETHANE	0.20	U	0.20	MDL	4.1	PQL	ug/Kg	UJ	S
DIBROMOMETHANE	0.24	U	0.24	MDL	4.1	PQL	ug/Kg	UJ	S
DICHLORODIFLUOROMETHANE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
ETHYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	S
HEXACHLOROBUTADIENE	0.14	U	0.14	MDL	4.1	PQL	ug/Kg	UJ	S
ISOPROPYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	S
m,p-Xylene	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
METHYL TERT-BUTYL ETHER (MTBE)	0.21	U	0.21	MDL	4.1	PQL	ug/Kg	UJ	S
METHYLENE CHLORIDE	0.45	J	0.24	MDL	4.1	PQL	ug/Kg	UJ	B, S
N-BUTYLBENZENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
N-PROPYLBENZENE	0.07	U	0.07	MDL	4.1	PQL	ug/Kg	UJ	S
O-XYLENE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
P-ISOPROPYLTOLUENE	0.11	U	0.11	MDL	4.1	PQL	ug/Kg	UJ	S
SEC-BUTYLBENZENE	0.06	U	0.06	MDL	4.1	PQL	ug/Kg	UJ	S
STYRENE	0.10	U	0.10	MDL	4.1	PQL	ug/Kg	UJ	S
TERT-BUTYLBENZENE	0.16	U	0.16	MDL	4.1	PQL	ug/Kg	UJ	S
TETRACHLOROETHENE	0.20	U	0.20	MDL	4.1	PQL	ug/Kg	UJ	S
TOLUENE	0.08	U	0.08	MDL	4.1	PQL	ug/Kg	UJ	S
TRANS-1,2-DICHLOROETHENE	0.12	U	0.12	MDL	4.1	PQL	ug/Kg	UJ	S
TRANS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.1	PQL	ug/Kg	UJ	S
TRICHLOROETHENE	0.15	U	0.15	MDL	4.1	PQL	ug/Kg	UJ	S
TRICHLOROFLUOROMETHANE	0.29	U	0.29	MDL	4.1	PQL	ug/Kg	UJ	S
VINYL CHLORIDE	0.20	U	0.20	MDL	4.1	PQL	ug/Kg	UJ	S

Sample ID: SL-018-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 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
ACETONE	17		7.5	MDL	9.0	PQL	ug/Kg	U	F
METHYLENE CHLORIDE	0.73	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-180-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 3:18:00 *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	0.31	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory:** LL

EDD Filename: PrepDE069_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-180-SA5B-SB-9.0-10.0 *Collected:* 1/26/2011 2:59:00 *Analysis Type:* RES *Dilution:* 0.98

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.56	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-262-SA5B-SB-4.0-5.0 *Collected:* 1/26/2011 11:29:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.76	J	0.28	MDL	4.7	PQL	ug/Kg	U	B

Sample ID: SL-263-SA5B-SB-2.0-3.0 *Collected:* 1/26/2011 9:14:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.57	J	0.27	MDL	4.6	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory: LL**

EDD Filename: PrepDE069_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory: LL**

EDD Filename: PrepDE069_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE069 **Laboratory: LL**

EDD Filename: PrepDE069_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE069

Method Blank Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02708CB222059	2/2/2011 8:59:00 PM	PHOSPHORUS TIN	1.46 mg/Kg 1.49 mg/Kg	SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0

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-015-SA5B-SB-4.0-5.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-016-SA5B-SB-4.0-5.0(RES)	TIN	3.04 mg/Kg	3.04U mg/Kg
SL-016-SA5B-SB-9.0-10.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-018-SA5B-SB-4.0-5.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-018-SA5B-SB-9.0-10.0(RES)	TIN	3.45 mg/Kg	3.45U mg/Kg
SL-180-SA5B-SB-4.0-5.0(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg
SL-180-SA5B-SB-9.0-10.0(RES)	TIN	3.33 mg/Kg	3.33U mg/Kg
SL-262-SA5B-SB-4.0-5.0(RES)	TIN	3.08 mg/Kg	3.08U mg/Kg
SL-263-SA5B-SB-2.0-3.0(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02726CB221045A	2/8/2011 10:45:00 AM	COPPER NICKEL ZINC	0.0782 mg/Kg 0.263 mg/Kg 0.643 mg/Kg	SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB60B211443A	1/28/2011 2:43:00 PM	METHYLENE CHLORIDE TOLUENE	0.42 ug/Kg 0.11 ug/Kg	SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0

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-015-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.49 ug/Kg	4.2U ug/Kg
SL-016-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.58 ug/Kg	3.9U ug/Kg
SL-016-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	3.8U ug/Kg
SL-016-SA5B-SB-9.0-10.0(RES)	TOLUENE	0.08 ug/Kg	3.8U ug/Kg
SL-018-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	4.1U ug/Kg
SL-018-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.73 ug/Kg	4.5U ug/Kg
SL-180-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.31 ug/Kg	4.1U ug/Kg
SL-180-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.5U ug/Kg
SL-262-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.76 ug/Kg	4.7U ug/Kg
SL-263-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.6U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD03B262212	2/4/2011 10:12:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0

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-015-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	38 ug/Kg	390U ug/Kg
SL-262-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	380U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB02B260102	2/3/2011 1:02:00 AM	Di-n-butylphthalate	0.14 ug/L	EB26-SA5B-012611

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
EB26-SA5B-012611(RES)	Di-n-butylphthalate	0.52 ug/L	1.0U ug/L

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB26-SA5B-012611(RES)	1/26/2011 1:00:00 PM	ACETONE	410 ug/L	SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0

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-016-SA5B-SB-9.0-10.0(RES)	ACETONE	8.2 ug/Kg	8.2U ug/Kg
SL-018-SA5B-SB-9.0-10.0(RES)	ACETONE	17 ug/Kg	17U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_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-018-SA5B-SB-4.0-5.0MS SL-018-SA5B-SB-4.0-5.0MSD (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	ANTIMONY	13	16	75.00-125.00	-	ANTIMONY	J (all detects) UJ(all non-detects) Post Spike = 76%
SL-018-SA5B-SB-4.0-5.0MS SL-018-SA5B-SB-4.0-5.0MSD (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	BARIUM	157	134	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-018-SA5B-SB-4.0-5.0MS SL-018-SA5B-SB-4.0-5.0MSD (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	ALUMINUM CALCIUM IRON MAGNESIUM	1569 - 502 134	1692 146 564 147	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM CALCIUM IRON MAGNESIUM	No Qual, >4x
SL-018-SA5B-SB-4.0-5.0MS SL-018-SA5B-SB-4.0-5.0MSD (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	MANGANESE PHOSPHORUS	-20 28	11 40	75.00-125.00 75.00-125.00	- -	MANGANESE PHOSPHORUS	No Qual, >4x
SL-015-SA5B-SB-4.0-5.0MSD (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	TITANIUM	-	131	75.00-125.00	-	TITANIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_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-015-SA5B-SB-4.0-5.0MS	EFH (C15-C20)	-	155	49.00-123.00	24 (20.00)	EFH (C15-C20)	J(all detects)
SL-015-SA5B-SB-4.0-5.0MSD	EFH (C21-C30)	182	903	49.00-123.00	56 (20.00)	EFH (C21-C30)	EFH (C21-C30) and
(SL-015-SA5B-SB-4.0-5.0)	EFH (C30-C40)	470	2351	49.00-123.00	69 (20.00)	EFH (C30-C40)	(C30-C40) No Qual, >4x

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-016-SA5B-SB-9.0-10.0MS (SL-016-SA5B-SB-9.0-10.0)	TETRACHLOROETHENE	163	-	42.00-149.00	-	TETRACHLOROETHENE	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-018-SA5B-SB-4.0-5.0DUP (SL-015-SA5B-SB-4.0-5.0 SL -016-SA5B-SB-4.0-5.0 SL -016-SA5B-SB-9.0-10.0 SL -018-SA5B-SB-4.0-5.0 SL -018-SA5B-SB-9.0-10.0 SL -180-SA5B-SB-4.0-5.0 SL -180-SA5B-SB-9.0-10.0 SL -262-SA5B-SB-4.0-5.0 SL -263-SA5B-SB-2.0-3.0)	Zirconium	22	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-018-SA5B-SB-4.0-5.0DUP (SL-015-SA5B-SB-4.0-5.0 SL -016-SA5B-SB-4.0-5.0 SL -016-SA5B-SB-9.0-10.0 SL -018-SA5B-SB-4.0-5.0 SL -018-SA5B-SB-9.0-10.0 SL -180-SA5B-SB-4.0-5.0 SL -180-SA5B-SB-9.0-10.0 SL -262-SA5B-SB-4.0-5.0 SL -263-SA5B-SB-2.0-3.0)	ANTIMONY	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9WBLCSQ260133 P9WBLCSY260204 (EB26-SA5B-012611)	N-NITROSODIMETHYLAMINE	54	69	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10316AQ241554A P10316AY241536A (EB26-SA5B-012611)	Aroclor 5442	60	68	75.00-125.00	-	Aroclor 5432, 5442, 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
P02726CQ221049A (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	ANTIMONY	46	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2LALCSQ262056 (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	1-METHYLNAPHTHALENE	121	-	72.00-120.00	-	1-METHYLNAPHTHALENE	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_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
P9LALCSQ260051 (SL-016-SA5B-SB-9.0-10.0)	PHENOL	113	-	58.00-112.00	-	PHENOL	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10312AQ240052A P10312AY240033A (SL-015-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-4.0-5.0 SL-016-SA5B-SB-9.0-10.0 SL-018-SA5B-SB-4.0-5.0 SL-018-SA5B-SB-9.0-10.0 SL-180-SA5B-SB-4.0-5.0 SL-180-SA5B-SB-9.0-10.0 SL-262-SA5B-SB-4.0-5.0 SL-263-SA5B-SB-2.0-3.0)	Aroclor 5442	57	62	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
TB-012611	TRIFLUOROTOLUENE (FID)	68	77.00-119.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-018-SA5B-SB-4.0-5.0	4-Bromofluorobenzene	68	74.00-121.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-016-SA5B-SB-9.0-10.0	PHENOL-D6	128	25.00-120.00	No Affected Compounds	No Qual One Out

Reporting Limit Outliers

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB26-SA5B-012611	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.12	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.15	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.52	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.020	0.050	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5B-SB-9.0-10.0	FLUORIDE	J	0.95	1.1	PQL	mg/Kg	J (all detects)
	Nitrate-NO3	J	1.1	1.7	PQL	mg/Kg	
SL-018-SA5B-SB-4.0-5.0	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)
SL-180-SA5B-SB-9.0-10.0	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	BORON	J	2.99	5.64	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.3	PQL	mg/Kg	
	Zirconium	J	2.53	5.64	PQL	mg/Kg	
SL-016-SA5B-SB-4.0-5.0	BORON	J	2.22	5.60	PQL	mg/Kg	J (all detects)
	TIN	J	3.04	11.2	PQL	mg/Kg	
	Zirconium	J	1.57	5.60	PQL	mg/Kg	
SL-016-SA5B-SB-9.0-10.0	BORON	J	2.82	5.52	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.0	PQL	mg/Kg	
	Zirconium	J	2.62	5.52	PQL	mg/Kg	
SL-018-SA5B-SB-4.0-5.0	BORON	J	4.02	5.74	PQL	mg/Kg	J (all detects)
	TIN	J	2.43	11.5	PQL	mg/Kg	
	Zirconium	J	2.66	5.74	PQL	mg/Kg	
SL-018-SA5B-SB-9.0-10.0	TIN	J	3.45	10.9	PQL	mg/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	BORON	J	1.33	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	2.75	11.0	PQL	mg/Kg	
	Zirconium	J	2.35	5.51	PQL	mg/Kg	
SL-180-SA5B-SB-9.0-10.0	TIN	J	3.33	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.44	5.68	PQL	mg/Kg	
SL-262-SA5B-SB-4.0-5.0	TIN	J	3.08	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.37	5.71	PQL	mg/Kg	
SL-263-SA5B-SB-2.0-3.0	BORON	J	1.29	5.51	PQL	mg/Kg	J (all detects)
	SODIUM	J	107	110	PQL	mg/Kg	
	TIN	J	2.46	11.0	PQL	mg/Kg	
	Zirconium	J	2.00	5.51	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	SELENIUM SILVER	J J	0.283 0.0311	0.447 0.112	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-016-SA5B-SB-4.0-5.0	SILVER	J	0.0324	0.114	PQL	mg/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	SELENIUM SILVER	J J	0.138 0.0487	0.429 0.107	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-018-SA5B-SB-4.0-5.0	ANTIMONY SELENIUM SILVER	J J J	0.0711 0.176 0.0305	0.230 0.459 0.115	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	CADMIUM SELENIUM SILVER	J J J	0.0773 0.226 0.0429	0.111 0.444 0.111	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	CADMIUM SELENIUM SILVER	J J J	0.0822 0.118 0.0391	0.112 0.449 0.112	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-180-SA5B-SB-9.0-10.0	SELENIUM	J	0.181	0.445	PQL	mg/Kg	J (all detects)
SL-262-SA5B-SB-4.0-5.0	SELENIUM SILVER	J J	0.403 0.0300	0.457 0.114	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-263-SA5B-SB-2.0-3.0	CADMIUM SELENIUM SILVER	J J J	0.0834 0.111 0.0454	0.107 0.428 0.107	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)
SL-016-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-018-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.55	1.1	PQL	mg/Kg	J (all detects)
SL-180-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)
SL-262-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-263-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	MERCURY	J	0.0128	0.110	PQL	mg/Kg	J (all detects)
SL-016-SA5B-SB-4.0-5.0	MERCURY	J	0.0239	0.113	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE069 **Laboratory: LL**

EDD Filename: DE069_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5B-SB-9.0-10.0	MERCURY	J	0.0117	0.104	PQL	mg/Kg	J (all detects)
SL-018-SA5B-SB-4.0-5.0	MERCURY	J	0.0042	0.110	PQL	mg/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	MERCURY	J	0.0067	0.106	PQL	mg/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	MERCURY	J	0.0034	0.108	PQL	mg/Kg	J (all detects)
SL-180-SA5B-SB-9.0-10.0	MERCURY	J	0.0265	0.108	PQL	mg/Kg	J (all detects)
SL-262-SA5B-SB-4.0-5.0	MERCURY	J	0.0073	0.112	PQL	mg/Kg	J (all detects)
SL-263-SA5B-SB-2.0-3.0	MERCURY	J	0.0078	0.108	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5B-SB-4.0-5.0	METHANOL	J	120	570	PQL	ug/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	METHANOL	J	240	550	PQL	ug/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	METHANOL	J	130	560	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.58	1.4	PQL	mg/Kg	J (all detects)
SL-016-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.95	1.4	PQL	mg/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	EFH (C15-C20)	J	3.0	6.6	PQL	mg/Kg	J (all detects)
SL-018-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.82	1.4	PQL	mg/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	EFH (C21-C30) EFH (C30-C40)	J J	0.54 0.93	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	1.3	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	0.91 0.47	2.0 2.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-016-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.90	1.9	PQL	ug/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	AROCLOR 1254	J	0.89	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5B-SB-4.0-5.0	AROCLOR 1254	J	1.2	2.0	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.49	4.2	PQL	ug/Kg	J (all detects)
SL-016-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.58	3.9	PQL	ug/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	BENZENE	J	0.1	3.8	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.42	3.8	PQL	ug/Kg	
	TOLUENE	J	0.08	3.8	PQL	ug/Kg	
SL-018-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.45	4.1	PQL	ug/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.73	4.5	PQL	ug/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.31	4.1	PQL	ug/Kg	J (all detects)
SL-180-SA5B-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.56	4.5	PQL	ug/Kg	J (all detects)
SL-262-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.76	4.7	PQL	ug/Kg	J (all detects)
SL-263-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.57	4.6	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	390	PQL	ug/Kg	J (all detects)
SL-016-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	370	PQL	ug/Kg	J (all detects)
	PHENOL	J	19	180	PQL	ug/Kg	
SL-262-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.56	1.9	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	0.90	1.9	PQL	ug/Kg	
SL-016-SA5B-SB-4.0-5.0	BENZO(A)PYRENE	J	0.97	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	21	PQL	ug/Kg	
	CHRYSENE	J	0.82	1.9	PQL	ug/Kg	
	Diethylphthalate	J	19	21	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE069 Laboratory: LL

EDD Filename: DE069_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5B-SB-9.0-10.0	2-METHYLNAPHTHALENE	J	0.75	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	0.75	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.84	1.8	PQL	ug/Kg	
	FLUORENE	J	1.4	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	
SL-018-SA5B-SB-4.0-5.0	Diethylphthalate	J	15	21	PQL	ug/Kg	J (all detects)
SL-018-SA5B-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	20	PQL	ug/Kg	J (all detects)
SL-180-SA5B-SB-4.0-5.0	Diethylphthalate	J	18	21	PQL	ug/Kg	J (all detects)
SL-262-SA5B-SB-4.0-5.0	NAPHTHALENE	J	0.87	1.9	PQL	ug/Kg	J (all detects)
SL-263-SA5B-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	20	PQL	ug/Kg	J (all detects)

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5B-SB-9.0-10.0	FORMALDEHYDE	J	1400	1700	PQL	ug/Kg	J (all detects)

LDC #: 25750T4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/11
SDG #: DE069 ADR
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: C

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	Fe, Ti
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Mg, Mn, P, Zn >4X)
VII.	Duplicate Sample Analysis	N	D/D (Sb, Zr <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ (Cr: 12% Cu: 16%)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=9

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-015-SA5B-SB-4.0-5.0	11	(X2) MSD	21		31	
2	SL-016-SA5B-SB-4.0-5.0	12	↓ DUP	22		32	
3	SL-016-SA5B-SB-9.0-10.0	13	(X4) MS	23		33	
4	SL-018-SA5B-SB-4.0-5.0	14	↓ MSD	24		34	
5	SL-018-SA5B-SB-9.0-10.0	15	↓ DUP	25		35	
6	SL-180-SA5B-SB-4.0-5.0	16	SL-180-SA5B-SB-10.0-12.0	26		36	
7	SL-262-SA5B-SB-4.0-5.0	17		27		37	
8	SL-263-SA5B-SB-2.0-3.0	18		28		38	
9	EB26-SA5B-012611 ✓	19		29		39	
10	(X1) MS (HG)	20		30		40	

Notes: _____

LDC #: 25750T 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 100x x MS: 2xdil
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	6	16	7	8									
Sb			0.40	0.4				0.071			~~0.068~~										
Zr			6.4	3.2	2.5	1.6	2.6	2.7	2.4	2.4	2.4	2.0									

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.

SAMPLE DELIVERY GROUP

DE070

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
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3005A	6010B	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3020A	6020	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3510C	8015B	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3510C	8015M	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3510C	8082	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3510C	8270C	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3510C	8270C SIM	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	3520C	1625C	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	5030B	8015M	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	5030B	8260B	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	5030B	8260B SIM	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	8330	8330A	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	Gen Prep	300.0	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	Gen Prep	314.0	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	Gen Prep	7199	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	Gen Prep	8015B	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	Gen Prep	8015M	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	Gen Prep	9040B	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	METHOD	7470A	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	METHOD	8315A	III
27-Jan-2011	EB27-SA5B-012711	6193672	EB	METHOD	9012B	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3050B	6010B	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3050B	6020	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3060A	7199	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3546	1625C	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	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
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3550B	8015M	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3550B	8082	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3550B	8270C	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	3550B	8270C SIM	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	5035	8015M	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	5035	8260B	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	5035	8260B SIM	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	8330	8330A	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	Gen Prep	9045M	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	300.0	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	314.0	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	7471A	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	8015B	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	8015M	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	8315A	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0	6193662	N	METHOD	9012B	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0DUP	P193662D271519B	DUP	METHOD	314.0	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0DUP	P193662D271825B	DUP	METHOD	300.0	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MSD	P193662M241825A	MSD	3550B	8082	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MSD	P193662M261214	MSD	3550B	8270C SIM	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MSD	P193662M322259A	MSD	METHOD	8015M	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MSD	P193662M322352A	MSD	3550B	8015B	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MS	P193662R241806A	MS	3550B	8082	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MS	P193662R261143	MS	3550B	8270C SIM	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MS	P193662R271543B	MS	METHOD	314.0	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MS	P193662R271841B	MS	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
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MS	P193662R322224A	MS	METHOD	8015M	III
27-Jan-2011	SL-017-SA5B-SB-4.0-5.0MS	P193662R322307A	MS	3550B	8015B	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3050B	6010B	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3050B	6020	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3060A	7199	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3546	1625C	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3550B	8015B	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3550B	8015M	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3550B	8082	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3550B	8270C	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	3550B	8270C SIM	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	5035	8015M	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	5035	8260B	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	5035	8260B SIM	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	8330	8330A	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	Gen Prep	9045M	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	300.0	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	314.0	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	7471A	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	8015B	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	8015M	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	8315A	III
27-Jan-2011	SL-017-SA5B-SB-9.0-10.0	6193663	N	METHOD	9012B	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3050B	6010B	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3050B	6020	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	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
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3546	1625C	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3550B	8015B	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3550B	8015M	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3550B	8082	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3550B	8270C	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	3550B	8270C SIM	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	5035	8015M	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	5035	8260B	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	5035	8260B SIM	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	8330	8330A	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	Gen Prep	9045M	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	300.0	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	314.0	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	7471A	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	8015B	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	8015M	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	8315A	III
27-Jan-2011	SL-181-SA5B-SB-4.0-5.0	6193666	N	METHOD	9012B	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3050B	6010B	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3050B	6020	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3060A	7199	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3546	1625C	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3550B	8015B	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3550B	8015M	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3550B	8082	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	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
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	3550B	8270C SIM	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	5035	8015M	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	5035	8260B	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	5035	8260B SIM	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	8330	8330A	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	Gen Prep	9045M	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	300.0	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	314.0	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	7471A	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	8015B	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	8015M	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	8315A	III
27-Jan-2011	SL-021-SA5B-SB-4.0-5.0	6193664	N	METHOD	9012B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3050B	6010B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3050B	6020	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3060A	7199	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3546	1625C	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3550B	8015B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3550B	8015M	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3550B	8082	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3550B	8270C	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	3550B	8270C SIM	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	5035	8015M	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	5035	8260B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	5035	8260B SIM	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	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
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	Gen Prep	9045M	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	300.0	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	314.0	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	7471A	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	8015B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	8015M	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	8315A	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10	6193665	N	METHOD	9012B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10DUP	P193665D271717B	DUP	METHOD	9012B	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10MSD	P193665M261259	MSD	3550B	8270C	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10MS	P193665R261234	MS	3550B	8270C	III
27-Jan-2011	SL-021-SA5B-SB-9.0-10MS	P193665R271719B	MS	METHOD	9012B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3060A	7199	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3546	1625C	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3550B	8015B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3550B	8015M	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3550B	8082	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3550B	8270C	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	3550B	8270C SIM	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	5035	8015M	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	5035	8260B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	5035	8260B SIM	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	8330	8330A	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	Gen Prep	9045M	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
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	300.0	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	314.0	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	7471A	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	8015B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	8015M	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	8315A	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5	6193671	N	METHOD	9012B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D220207	DUP	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D220244	DUP	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D220256	DUP	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D220905	DUP	METHOD	7471A	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D221725A	DUP	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D221725B	DUP	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D221725C	DUP	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5DUP	P193671D221725D	DUP	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M220215	MSD	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M220252	MSD	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M220304	MSD	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M220908	MSD	METHOD	7471A	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M221731A	MSD	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M221731B	MSD	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M221731C	MSD	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MSD	P193671M221731D	MSD	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R220211	MS	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R220248	MS	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R220300	MS	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
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R220906	MS	METHOD	7471A	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R221728A	MS	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R221728B	MS	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R221728C	MS	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-7.5-8.5MS	P193671R221728D	MS	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3050B	6010B	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3050B	6020	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3060A	7199	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3546	1625C	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3550B	8015B	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3550B	8015M	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3550B	8082	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3550B	8270C	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	3550B	8270C SIM	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	5035	8015M	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	5035	8260B	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	5035	8260B SIM	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	8330	8330A	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	Gen Prep	9045M	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	METHOD	300.0	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	METHOD	314.0	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	METHOD	7471A	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	METHOD	8015B	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	METHOD	8015M	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	N	METHOD	8315A	III
27-Jan-2011	SL-203-SA5B-SB-4.0-5.0	6193670	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
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	3050B	6010B	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	3050B	6020	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	3060A	7199	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	3550B	8082	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	3550B	8270C	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	3550B	8270C SIM	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	5035	8260B	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	5035	8260B SIM	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	Gen Prep	9045M	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	METHOD	300.0	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	METHOD	314.0	III
27-Jan-2011	SL-186-SA5B-SB-4.0-5.0	6193668	N	METHOD	7471A	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3050B	6010B	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3050B	6020	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3060A	7199	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3546	1625C	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3550B	8015B	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3550B	8015M	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3550B	8082	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3550B	8270C	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	3550B	8270C SIM	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	5035	8015M	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	5035	8260B	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	5035	8260B SIM	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	8330	8330A	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	Gen Prep	9045M	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
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	300.0	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	314.0	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	7471A	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	8015B	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	8015M	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	8315A	III
27-Jan-2011	SL-185-SA5B-SB-4.0-5.0	6193667	N	METHOD	9012B	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	3050B	6010B	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	3050B	6020	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	3060A	7199	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	3550B	8082	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	3550B	8270C	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	3550B	8270C SIM	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	5035	8260B	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	5035	8260B SIM	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	Gen Prep	9045M	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	METHOD	300.0	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	METHOD	314.0	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0	6193669	N	METHOD	7471A	III
27-Jan-2011	SL-192-SA5B-SB-4.0-5.0DUP	P193669D291150A	DUP	Gen Prep	9045M	III
27-Jan-2011	TB-012711	6193673	TB	5030B	8015M	III
27-Jan-2011	TB-012711	6193673	TB	5030B	8260B	III
27-Jan-2011	TB-012711	6193673	TB	5030B	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: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method Category: EM **Method:** 9040B **Matrix:** AQ

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PH	5.4		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM **Method:** 300.0 **Matrix:** SO

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.6	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

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

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.29	J	0.997	MDL	5.60	PQL	mg/Kg	J	Z
MANGANESE	266		0.0873	MDL	0.560	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
PHOSPHORUS	1460		0.627	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2780		20.2	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.15	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.37	J	0.941	MDL	5.60	PQL	mg/Kg	U	B

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.43	J	0.958	MDL	5.38	PQL	mg/Kg	J	Z
MANGANESE	243		0.0840	MDL	0.538	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	332		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2750		19.4	MDL	53.8	PQL	mg/Kg	J	Q
TIN	2.41	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.41	J	0.904	MDL	5.38	PQL	mg/Kg	U	B

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.22	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
MANGANESE	317		0.0847	MDL	0.543	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	1480		0.608	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3690		19.5	MDL	54.3	PQL	mg/Kg	J	Q
TIN	1.75	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.27	J	0.977	MDL	5.49	PQL	mg/Kg	J	Z
MANGANESE	286		0.0856	MDL	0.549	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	391		0.615	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2950		19.8	MDL	54.9	PQL	mg/Kg	J	Q
TIN	2.04	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.922	MDL	5.49	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:42:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.11	J	0.980	MDL	5.51	PQL	mg/Kg	J	Z
MANGANESE	357		0.0859	MDL	0.551	PQL	mg/Kg	J	Q

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
PHOSPHORUS	152		0.617	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	1680		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.72	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.47	J	0.925	MDL	5.51	PQL	mg/Kg	U	B

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.82	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
MANGANESE	283		0.0884	MDL	0.566	PQL	mg/Kg	J	Q

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
PHOSPHORUS	408		0.634	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	2840		20.4	MDL	56.6	PQL	mg/Kg	J	Q
SODIUM	109	J	42.3	MDL	113	PQL	mg/Kg	J	Z
TIN	2.19	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.21	J	0.952	MDL	5.66	PQL	mg/Kg	U	B

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.999	J	0.954	MDL	5.36	PQL	mg/Kg	J	Z
MANGANESE	136		0.0836	MDL	0.536	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	82.6		0.600	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1430		19.3	MDL	53.6	PQL	mg/Kg	J	Q
TIN	2.39	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.63	J	0.900	MDL	5.36	PQL	mg/Kg	U	B

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	188		0.0842	MDL	0.540	PQL	mg/Kg	J	Q

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	187		0.604	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1550		19.4	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.68	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.12	J	0.907	MDL	5.40	PQL	mg/Kg	U	B

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 11:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.50	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
MANGANESE	315		0.0889	MDL	0.570	PQL	mg/Kg	J	Q

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
PHOSPHORUS	262		0.638	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	3040		20.5	MDL	57.0	PQL	mg/Kg	J	Q
SODIUM	83.7	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	2.33	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.958	MDL	5.70	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-203-SA5B-SB-7.5-8.5 *Collected:* 1/27/2011 11:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.56	J	0.981	MDL	5.51	PQL	mg/Kg	J	Z
MANGANESE	180		0.0860	MDL	0.551	PQL	mg/Kg	J	Q

Sample ID: SL-203-SA5B-SB-7.5-8.5 *Collected:* 1/27/2011 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
PHOSPHORUS	284		0.617	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	1540		19.8	MDL	55.1	PQL	mg/Kg	J	Q
TIN	2.61	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.926	MDL	5.51	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	67.0		0.121	MDL	0.448	PQL	mg/Kg	J	E

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0672	U	0.0672	MDL	0.224	PQL	mg/Kg	UJ	Q
ARSENIC	3.42		0.0896	MDL	0.448	PQL	mg/Kg	J	Q
CHROMIUM	12.8		0.134	MDL	0.448	PQL	mg/Kg	J	Q, A
COBALT	4.13		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	6.67		0.0739	MDL	0.448	PQL	mg/Kg	J	Q, A
LEAD	4.81		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	7.51		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E, A
SILVER	0.0227	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	25.7		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0971	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	71.3		0.120	MDL	0.443	PQL	mg/Kg	J	E

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0799	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q
ARSENIC	3.82		0.0887	MDL	0.443	PQL	mg/Kg	J	Q
CADMIUM	0.0984	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	12.4		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	4.59		0.0222	MDL	0.111	PQL	mg/Kg	J	A
COPPER	6.75		0.0732	MDL	0.443	PQL	mg/Kg	J	Q, A
LEAD	4.42		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	6.94		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0223	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	26.5		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.121	MDL	0.447	PQL	mg/Kg	J	E

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.117	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.37		0.0895	MDL	0.447	PQL	mg/Kg	J	Q
CHROMIUM	12.7		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
COBALT	6.21		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	11.8		0.0738	MDL	0.447	PQL	mg/Kg	J	Q, A
LEAD	3.73		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	8.19		0.112	MDL	0.447	PQL	mg/Kg	J	Q, E, A
SILVER	0.0185	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	40.3		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	88.0		0.120	MDL	0.443	PQL	mg/Kg	J	E

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0665	U	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q
ARSENIC	4.00		0.0887	MDL	0.443	PQL	mg/Kg	J	Q
CHROMIUM	15.3		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	4.63		0.0222	MDL	0.111	PQL	mg/Kg	J	A
COPPER	8.46		0.0732	MDL	0.443	PQL	mg/Kg	J	Q, A
LEAD	5.35		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	9.32		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0384	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	30.1		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:42:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0548	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:42:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:42:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.129	J	0.0661	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	6.94		0.0881	MDL	0.441	PQL	mg/Kg	J	Q
CADMIUM	0.0975	J	0.0441	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	27.7		0.132	MDL	0.441	PQL	mg/Kg	J	Q, A
COBALT	6.40		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	9.56		0.0727	MDL	0.441	PQL	mg/Kg	J	Q, A
LEAD	6.57		0.0115	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	17.6		0.110	MDL	0.441	PQL	mg/Kg	J	Q, E, A
SILVER	0.0717	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	45.3		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
BARIUM	131		0.124	MDL	0.458	PQL	mg/Kg	J	E

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
ANTIMONY	0.0996	J	0.0686	MDL	0.229	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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	7.08		0.0915	MDL	0.458	PQL	mg/Kg	J	Q
CHROMIUM	22.7		0.137	MDL	0.458	PQL	mg/Kg	J	Q, A
COBALT	6.46		0.0229	MDL	0.114	PQL	mg/Kg	J	A
COPPER	9.95		0.0755	MDL	0.458	PQL	mg/Kg	J	Q, A
LEAD	7.59		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	12.1		0.114	MDL	0.458	PQL	mg/Kg	J	Q, E, A
SILVER	0.0568	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	39.2		0.0252	MDL	0.114	PQL	mg/Kg	J	Q, A

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0732	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	65.1		0.118	MDL	0.437	PQL	mg/Kg	J	E

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0741	J	0.0656	MDL	0.219	PQL	mg/Kg	J	Z, Q
ARSENIC	5.13		0.0874	MDL	0.437	PQL	mg/Kg	J	Q
CADMIUM	0.0649	J	0.0437	MDL	0.109	PQL	mg/Kg	J	Z
CHROMIUM	22.2		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	3.71		0.0219	MDL	0.109	PQL	mg/Kg	J	A
COPPER	7.98		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, A
LEAD	5.96		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	11.2		0.109	MDL	0.437	PQL	mg/Kg	J	Q, E, A
SILVER	0.0558	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	37.3		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.167	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.2		0.119	MDL	0.440	PQL	mg/Kg	J	E

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	6.72		0.0880	MDL	0.440	PQL	mg/Kg	J	Q
CADMIUM	0.0785	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	23.0		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	3.89		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	5.50		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, A
LEAD	5.30		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	11.7		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E, A
SILVER	0.0699	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	37.5		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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	0.111	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
BARIUM	109		0.123	MDL	0.456	PQL	mg/Kg	J	E

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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	0.139	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-203-SA5B-SB-4.0-5.0 **Collected:** 1/27/2011 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
ARSENIC	6.81		0.0912	MDL	0.456	PQL	mg/Kg	J	Q
CHROMIUM	21.4		0.137	MDL	0.456	PQL	mg/Kg	J	Q, A
COBALT	6.00		0.0228	MDL	0.114	PQL	mg/Kg	J	A
COPPER	10.7		0.0752	MDL	0.456	PQL	mg/Kg	J	Q, A
LEAD	19.6		0.0119	MDL	0.228	PQL	mg/Kg	J	Q, E
NICKEL	13.2		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E, A
SILVER	0.0719	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	37.3		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, A

Sample ID: SL-203-SA5B-SB-7.5-8.5 **Collected:** 1/27/2011 11:30:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0880	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SB-7.5-8.5 **Collected:** 1/27/2011 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
BARIUM	109		0.121	MDL	0.450	PQL	mg/Kg	J	E

Sample ID: SL-203-SA5B-SB-7.5-8.5 **Collected:** 1/27/2011 11:30:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.275		0.0674	MDL	0.225	PQL	mg/Kg	J	Q
ARSENIC	8.78		0.0899	MDL	0.450	PQL	mg/Kg	J	Q
CADMIUM	0.0651	J	0.0450	MDL	0.112	PQL	mg/Kg	J	Z
CHROMIUM	28.4		0.135	MDL	0.450	PQL	mg/Kg	J	Q, A
COBALT	7.53		0.0225	MDL	0.112	PQL	mg/Kg	J	A
COPPER	12.2		0.0742	MDL	0.450	PQL	mg/Kg	J	Q, A
LEAD	7.96		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	19.5		0.112	MDL	0.450	PQL	mg/Kg	J	Q, E, A
SILVER	0.0596	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	42.8		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** AQ

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

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

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *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-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *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	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.46	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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	0.52	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-203-SA5B-SB-7.5-8.5 *Collected:* 1/27/2011 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
HEXAVALENT CHROMIUM	0.30	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
MERCURY	0.0059	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0072	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0093	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0085	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
MERCURY	0.0058	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SB-7.5-8.5 *Collected:* 1/27/2011 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
MERCURY	0.0040	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: AQ**

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	4.48		1.18	MDL	2.35	PQL	ng/L	U	B

Method Category: SVOA

Method: 8015M **Matrix: AQ**

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
GASOLINE RANGE ORGANICS (C5-C12)	20	U	20	MDL	50	PQL	ug/L	UJ	S

Sample ID: TB-012711 *Collected:* 1/27/2011 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
GASOLINE RANGE ORGANICS (C5-C12)	20	U	20	MDL	50	PQL	ug/L	UJ	S

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *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)	0.55	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.78	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 11:45:00 *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)	1.3	J	0.47	MDL	1.4	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** AQ

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	L
Aroclor 5442	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	L
Aroclor 5460	0.11	U	0.11	MDL	0.54	PQL	ug/L	UJ	L

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.62	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *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	0.89	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *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	1.2	J	0.45	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	3.6	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, L

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	5.6		1.2	MDL	3.8	PQL	ug/Kg	J	L

Sample ID: SL-203-SA5B-SB-7.5-8.5 *Collected:* 1/27/2011 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	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Method Category: SVOA **Method:** 8270C **Matrix:** AQ

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	1	U	1	MDL	6	PQL	ug/L	UJ	L

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *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	370	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	23	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z
ACENAPHTHENE	82	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	97	J	19	MDL	190	PQL	ug/Kg	J	Z
CHRYSENE	44	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZOFURAN	64	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORENE	68	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	77	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:42:00 *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	28	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *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	38	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	32	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	34	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	19	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	19	MDL	380	PQL	ug/Kg	J	Z
CHRYSENE	43	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	68	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	57	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	84	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *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	25	J	19	MDL	370	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *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	370	PQL	ug/Kg	J	Z

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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	29	J	19	MDL	390	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	0.21	J	0.054	MDL	1.1	PQL	ug/L	J	Z
Di-n-butylphthalate	0.60	J	0.054	MDL	1.1	PQL	ug/L	U	B
NAPHTHALENE	0.025	J	0.011	MDL	0.054	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.011	U	0.011	MDL	0.054	PQL	ug/L	UJ	L
PHENANTHRENE	0.013	J	0.011	MDL	0.054	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.68	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Dimethylphthalate	23		6.9	MDL	21	PQL	ug/Kg	J	Q
Di-n-butylphthalate	8.5	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.8	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *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	1.0	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.77	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.76	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.5	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	1.7	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.41	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.79	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	6.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-203-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 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(B)FLUORANTHENE	0.89	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.93	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8015B **Matrix:** SO

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *Analysis Type:* REA3 *Dilution:* 1

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

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	420	J	110	MDL	560	PQL	ug/Kg	J	Z

Method Category: VOA
Method: 8260B **Matrix:** AQ

Sample ID: EB27-SA5B-012711 *Collected:* 1/27/2011 8:00:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	4	J	2	MDL	5	PQL	ug/L	J	Z

Method Category: VOA
Method: 8260B **Matrix:** SO

Sample ID: SL-017-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:15:00 *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	0.42	J	0.25	MDL	4.1	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory:** LL

EDD Filename: DE070_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-017-SA5B-SB-9.0-10.0 *Collected:* 1/27/2011 9:21:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.4	J	1.2	MDL	8.0	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.35	J	0.24	MDL	4.0	PQL	ug/Kg	U	B, F

Sample ID: SL-021-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 10:33:00 *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	0.40	J	0.24	MDL	4.0	PQL	ug/Kg	U	B, F

Sample ID: SL-021-SA5B-SB-9.0-10 *Collected:* 1/27/2011 10:42:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	1.9	J	1.2	MDL	7.7	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.52	J	0.23	MDL	3.9	PQL	ug/Kg	U	B, F

Sample ID: SL-181-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 9:42:00 *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	0.46	J	0.25	MDL	4.2	PQL	ug/Kg	U	B, F

Sample ID: SL-185-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:10:00 *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	7.9	J	6.7	MDL	8.1	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.31	J	0.24	MDL	4.0	PQL	ug/Kg	U	B, F

Sample ID: SL-186-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 2:37:00 *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	0.34	J	0.22	MDL	3.6	PQL	ug/Kg	U	B, F

Sample ID: SL-192-SA5B-SB-4.0-5.0 *Collected:* 1/27/2011 3:44:00 *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	0.39	J	0.23	MDL	3.8	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-203-SA5B-SB-4.0-5.0** ***Collected:*** **1/27/2011 11:45:00** ***Analysis Type:*** RES ***Dilution:*** 0.9

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	0.67	J	0.25	MDL	4.2	PQL	ug/Kg	U	B, F
TOLUENE	0.09	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: **SL-203-SA5B-SB-7.5-8.5** ***Collected:*** **1/27/2011 11:30:00** ***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	0.65	J	0.26	MDL	4.4	PQL	ug/Kg	U	B, F
TOLUENE	0.09	J	0.09	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE070

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE070
EDD Filename: DE070_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 7199 **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB27-SA5B-012711 (RES)	Sampling To Analysis	30.00	24.00	HOURS	J (all detects) UJ (all non-detects)

Method: 9040B **Preparation Method: Gen Prep**
Matrix: AQ

Sample ID	Type	Actual	Criteria	Units	Flag
EB27-SA5B-012711 (RES)	Sampling To Analysis	295.00	48.00	HOURS	J(all detects) R(all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB03B261044	2/7/2011 10:44:00 AM	N-NITROSODIMETHYLAMINE	1.70 ng/L	EB27-SA5B-012711

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
EB27-SA5B-012711(RES)	N-NITROSODIMETHYLAMINE	4.48 ng/L	4.48U ng/L

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P02808DB220148	2/3/2011 1:48:00 AM	PHOSPHORUS TIN	1.06 mg/Kg 1.09 mg/Kg	SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-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-017-SA5B-SB-4.0-5.0(RES)	TIN	2.15 mg/Kg	2.15U mg/Kg
SL-017-SA5B-SB-9.0-10.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-021-SA5B-SB-4.0-5.0(RES)	TIN	1.75 mg/Kg	1.75U mg/Kg
SL-021-SA5B-SB-9.0-10(RES)	TIN	2.04 mg/Kg	2.04U mg/Kg
SL-181-SA5B-SB-4.0-5.0(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-185-SA5B-SB-4.0-5.0(RES)	TIN	2.19 mg/Kg	2.19U mg/Kg
SL-186-SA5B-SB-4.0-5.0(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-192-SA5B-SB-4.0-5.0(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-203-SA5B-SB-4.0-5.0(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-203-SA5B-SB-7.5-8.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE070 | Laboratory: LL

EDD Filename: DE070_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB60B211443A	1/28/2011 2:43:00 PM	METHYLENE CHLORIDE TOLUENE	0.42 ug/Kg 0.11 ug/Kg	SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0
VBLKB62B211820A	2/1/2011 6:20:00 PM	METHYLENE CHLORIDE TOLUENE	0.96 ug/Kg 0.25 ug/Kg	SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-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-017-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.1U ug/Kg
SL-017-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.35 ug/Kg	4.0U ug/Kg
SL-021-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	4.0U ug/Kg
SL-021-SA5B-SB-9.0-10(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	3.9U ug/Kg
SL-181-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	4.2U ug/Kg
SL-185-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.31 ug/Kg	4.0U ug/Kg
SL-186-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.34 ug/Kg	3.6U ug/Kg
SL-192-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.39 ug/Kg	3.8U ug/Kg
SL-203-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.2U ug/Kg
SL-203-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	4.2U ug/Kg
SL-203-SA5B-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.4U ug/Kg
SL-203-SA5B-SB-7.5-8.5(RES)	TOLUENE	0.09 ug/Kg	4.4U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB02B260102	2/3/2011 1:02:00 AM	Di-n-butylphthalate	0.14 ug/L	EB27-SA5B-012711

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
EB27-SA5B-012711(RES)	Di-n-butylphthalate	0.60 ug/L	1.1U ug/L

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 8260B
Matrix: SO

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB27-SA5B-012711(RES)	1/27/2011 8:00:00 AM	METHYLENE CHLORIDE	4 ug/L	SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-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-017-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	4.1U ug/Kg
SL-017-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.35 ug/Kg	4.0U ug/Kg
SL-021-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.40 ug/Kg	4.0U ug/Kg
SL-021-SA5B-SB-9.0-10(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	3.9U ug/Kg
SL-181-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	4.2U ug/Kg
SL-185-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.31 ug/Kg	4.0U ug/Kg
SL-186-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.34 ug/Kg	3.6U ug/Kg
SL-192-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.39 ug/Kg	3.8U ug/Kg
SL-203-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.2U ug/Kg
SL-203-SA5B-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	4.4U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE070 | Laboratory: LL

EDD Filename: DE070_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-203-SA5B-SB-7.5-8.5MS SL-203-SA5B-SB-7.5-8.5MSD (SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-7.5-8.5)	ARSENIC CHROMIUM COPPER VANADIUM ZINC	289 152 133 202 220	228 - - 133 130	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ARSENIC CHROMIUM COPPER VANADIUM ZINC	J (all detects) Zn No Qual, >4x
SL-203-SA5B-SB-7.5-8.5MS SL-203-SA5B-SB-7.5-8.5MSD (SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-7.5-8.5)	ANTIMONY LEAD NICKEL	41 168 155	51 - -	75.00-125.00 75.00-125.00 75.00-125.00	- 21 (20.00) 22 (20.00)	ANTIMONY LEAD NICKEL	J(all detects) UJ(all non-detects)
SL-203-SA5B-SB-7.5-8.5MS SL-203-SA5B-SB-7.5-8.5MSD (SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-7.5-8.5)	BARIUM	652	334	75.00-125.00	22 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-203-SA5B-SB-7.5-8.5MS SL-203-SA5B-SB-7.5-8.5MSD (SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-7.5-8.5)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	3391 376 10886 1245 354 143 181 784	2636 339 8119 1134 296 169 172 527	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	- - - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE PHOSPHORUS POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Ti No Qual. >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_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-017-SA5B-SB-4.0-5.0MSD (SL-017-SA5B-SB-4.0-5.0)	ACENAPHTHENE Butylbenzylphthalate	- -	107 177	63.00-105.00 73.00-140.00	- 37 (30.00)	ACENAPHTHENE Butylbenzylphthalate	J(all detects)
SL-017-SA5B-SB-4.0-5.0MS SL-017-SA5B-SB-4.0-5.0MSD (SL-017-SA5B-SB-4.0-5.0)	Dimethylphthalate	50	60	74.00-118.00	-	Dimethylphthalate	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5B-SB-9.0-10MSD (SL-021-SA5B-SB-9.0-10)	2,4-DINITROPHENOL BENZOIC ACID	- -	- -	20.00-143.00 10.00-173.00	37 (30.00) 112 (30.00)	2,4-DINITROPHENOL BENZOIC ACID	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-017-SA5B-SB-4.0-5.0MS (SL-017-SA5B-SB-4.0-5.0)	p-Terphenyl	72	-	75.00-125.00	-	p-Terphenyl	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-203-SA5B-SB-7.5-8.5DUP (SL-017-SA5B-SB-4.0-5.0 SL -017-SA5B-SB-9.0-10.0 SL -021-SA5B-SB-4.0-5.0 SL -021-SA5B-SB-9.0-10 SL -181-SA5B-SB-4.0-5.0 SL -185-SA5B-SB-4.0-5.0 SL -186-SA5B-SB-4.0-5.0 SL -192-SA5B-SB-4.0-5.0 SL -203-SA5B-SB-4.0-5.0 SL -203-SA5B-SB-7.5-8.5)	BORON Zirconium	44 21	20.00 20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-203-SA5B-SB-7.5-8.5DUP (SL-017-SA5B-SB-4.0-5.0 SL -017-SA5B-SB-9.0-10.0 SL -021-SA5B-SB-4.0-5.0 SL -021-SA5B-SB-9.0-10 SL -181-SA5B-SB-4.0-5.0 SL -185-SA5B-SB-4.0-5.0 SL -186-SA5B-SB-4.0-5.0 SL -192-SA5B-SB-4.0-5.0 SL -203-SA5B-SB-4.0-5.0 SL -203-SA5B-SB-7.5-8.5)	CADMIUM SELENIUM	24 24	20.00 20.00	No Qual OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-203-SA5B-SB-7.5-8.5DUP (SL-017-SA5B-SB-4.0-5.0 SL -017-SA5B-SB-9.0-10.0 SL -021-SA5B-SB-4.0-5.0 SL -021-SA5B-SB-9.0-10 SL -181-SA5B-SB-4.0-5.0 SL -185-SA5B-SB-4.0-5.0 SL -186-SA5B-SB-4.0-5.0 SL -192-SA5B-SB-4.0-5.0 SL -203-SA5B-SB-4.0-5.0 SL -203-SA5B-SB-7.5-8.5)	MERCURY	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9WBLCSQ260133 P9WBLCSY260204 (EB27-SA5B-012711)	N-NITROSODIMETHYLAMINE	54	69	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J (all detects) UJ (all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P2WALCSQ260003 (EB27-SA5B-012711)	4-CHLOROANILINE	35	-	42.00-124.00	-	4-CHLOROANILINE	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10316AQ241554A P10316AY241536A (EB27-SA5B-012711)	Aroclor 5442	60	68	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY94Q211251A LCSY94Y211312A (TB-012711)	1,2-DIBROMO-3-CHLOROPROP METHYLENE CHLORIDE	124 126	- 122	66.00-120.00 80.00-120.00	- -	1,2-DIBROMO-3-CHLOROPRO METHYLENE CHLORIDE	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10345AQ241538A P10345AY241519A (SL-017-SA5B-SB-4.0-5.0 SL-017-SA5B-SB-9.0-10.0 SL-021-SA5B-SB-4.0-5.0 SL-021-SA5B-SB-9.0-10 SL-181-SA5B-SB-4.0-5.0 SL-185-SA5B-SB-4.0-5.0 SL-186-SA5B-SB-4.0-5.0 SL-192-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-4.0-5.0 SL-203-SA5B-SB-7.5-8.5)	Aroclor 5442	59	60	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB27-SA5B-012711	TRIFLUOROTOLUENE (FID)	68	77.00-119.00	All Target Analytes	J (all detects) UJ (all non-detects)
TB-012711	TRIFLUOROTOLUENE (FID)	69	77.00-119.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB27-SA5B-012711	2-NITRO-M-XYLENE	125	75.00-120.00	All Target Analytes	J(all detects)

Method: 8330A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-017-SA5B-SB-9.0-10.0	2-NITRO-M-XYLENE	140	65.00-135.00	All Target Analytes	J(all detects)
SL-185-SA5B-SB-4.0-5.0	2-NITRO-M-XYLENE	139	65.00-135.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE070 | Laboratory: LL

EDD Filename: DE070_v1 | eQAPP Name: CDM_SSFL_110509

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB27-SA5B-012711	METHYLENE CHLORIDE	J	4	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB27-SA5B-012711	Diethylphthalate	J	0.21	1.1	PQL	ug/L	J (all detects)
	Di-n-butylphthalate	J	0.60	1.1	PQL	ug/L	
	NAPHTHALENE	J	0.025	0.054	PQL	ug/L	
	PHENANTHRENE	J	0.013	0.054	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5B-SB-9.0-10	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	BORON	J	3.29	5.60	PQL	mg/Kg	J (all detects)
	TIN	J	2.15	11.2	PQL	mg/Kg	
	Zirconium	J	2.37	5.60	PQL	mg/Kg	
SL-017-SA5B-SB-9.0-10.0	BORON	J	2.43	5.38	PQL	mg/Kg	J (all detects)
	TIN	J	2.41	10.8	PQL	mg/Kg	
	Zirconium	J	1.41	5.38	PQL	mg/Kg	
SL-021-SA5B-SB-4.0-5.0	BORON	J	2.22	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	1.75	10.9	PQL	mg/Kg	
SL-021-SA5B-SB-9.0-10	BORON	J	3.27	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	2.04	11.0	PQL	mg/Kg	
	Zirconium	J	2.09	5.49	PQL	mg/Kg	
SL-181-SA5B-SB-4.0-5.0	BORON	J	1.11	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	2.72	11.0	PQL	mg/Kg	
	Zirconium	J	2.47	5.51	PQL	mg/Kg	
SL-185-SA5B-SB-4.0-5.0	BORON	J	1.82	5.66	PQL	mg/Kg	J (all detects)
	SODIUM	J	109	113	PQL	mg/Kg	
	TIN	J	2.19	11.3	PQL	mg/Kg	
	Zirconium	J	2.21	5.66	PQL	mg/Kg	
SL-186-SA5B-SB-4.0-5.0	BORON	J	0.999	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.7	PQL	mg/Kg	
	Zirconium	J	2.63	5.36	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-192-SA5B-SB-4.0-5.0	TIN	J	2.68	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.12	5.40	PQL	mg/Kg	
SL-203-SA5B-SB-4.0-5.0	BORON	J	2.50	5.70	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.7	114	PQL	mg/Kg	
	TIN	J	2.33	11.4	PQL	mg/Kg	
	Zirconium	J	2.71	5.70	PQL	mg/Kg	
SL-203-SA5B-SB-7.5-8.5	BORON	J	1.56	5.51	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	11.0	PQL	mg/Kg	
	Zirconium	J	2.75	5.51	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	SELENIUM	J	0.128	0.448	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0227	0.112	PQL	mg/Kg	
SL-017-SA5B-SB-9.0-10.0	ANTIMONY	J	0.0799	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0984	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0971	0.443	PQL	mg/Kg	
	SILVER	J	0.0223	0.111	PQL	mg/Kg	
SL-021-SA5B-SB-4.0-5.0	ANTIMONY	J	0.117	0.224	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0185	0.112	PQL	mg/Kg	
SL-021-SA5B-SB-9.0-10	SELENIUM	J	0.127	0.443	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0384	0.111	PQL	mg/Kg	
SL-181-SA5B-SB-4.0-5.0	ANTIMONY	J	0.129	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0975	0.110	PQL	mg/Kg	
	SELENIUM	J	0.0548	0.441	PQL	mg/Kg	
	SILVER	J	0.0717	0.110	PQL	mg/Kg	
SL-185-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0996	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.458	PQL	mg/Kg	
	SILVER	J	0.0568	0.114	PQL	mg/Kg	
SL-186-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0741	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0649	0.109	PQL	mg/Kg	
	SELENIUM	J	0.0732	0.437	PQL	mg/Kg	
	SILVER	J	0.0558	0.109	PQL	mg/Kg	
SL-192-SA5B-SB-4.0-5.0	ANTIMONY	J	0.115	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0785	0.110	PQL	mg/Kg	
	SELENIUM	J	0.167	0.440	PQL	mg/Kg	
	SILVER	J	0.0699	0.110	PQL	mg/Kg	
SL-203-SA5B-SB-4.0-5.0	ANTIMONY	J	0.139	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.456	PQL	mg/Kg	
	SILVER	J	0.0719	0.114	PQL	mg/Kg	
SL-203-SA5B-SB-7.5-8.5	CADMIUM	J	0.0651	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0880	0.450	PQL	mg/Kg	
	SILVER	J	0.0596	0.112	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-017-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-021-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.48	1.1	PQL	mg/Kg	J (all detects)
SL-185-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-186-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.52	1.2	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SB-7.5-8.5	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	MERCURY	J	0.0059	0.110	PQL	mg/Kg	J (all detects)
SL-017-SA5B-SB-9.0-10.0	MERCURY	J	0.0072	0.106	PQL	mg/Kg	J (all detects)
SL-021-SA5B-SB-4.0-5.0	MERCURY	J	0.0093	0.108	PQL	mg/Kg	J (all detects)
SL-021-SA5B-SB-9.0-10	MERCURY	J	0.0085	0.106	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SB-4.0-5.0	MERCURY	J	0.0058	0.115	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SB-7.5-8.5	MERCURY	J	0.0040	0.108	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5B-SB-9.0-10	METHANOL	J	420	560	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-9.0-10.0	EFH (C15-C20)	J	0.55	1.3	PQL	mg/Kg	J (all detects)
SL-185-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	0.78	1.4	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	1.3	1.4	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE070 **Laboratory: LL**

EDD Filename: DE070_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.62	2.0	PQL	ug/Kg	J (all detects)
SL-017-SA5B-SB-9.0-10.0	AROCLOR 1260	J	0.89	1.9	PQL	ug/Kg	J (all detects)
SL-185-SA5B-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	1.2 3.6	1.9 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.42	4.1	PQL	ug/Kg	J (all detects)
SL-017-SA5B-SB-9.0-10.0	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	1.4 0.35	8.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-021-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.40	4.0	PQL	ug/Kg	J (all detects)
SL-021-SA5B-SB-9.0-10	2-BUTANONE (MEK) METHYLENE CHLORIDE	J J	1.9 0.52	7.7 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-181-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.46	4.2	PQL	ug/Kg	J (all detects)
SL-185-SA5B-SB-4.0-5.0	ACETONE METHYLENE CHLORIDE	J J	7.9 0.31	8.1 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-186-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.34	3.6	PQL	ug/Kg	J (all detects)
SL-192-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.39	3.8	PQL	ug/Kg	J (all detects)
SL-203-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.67 0.09	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-203-SA5B-SB-7.5-8.5	METHYLENE CHLORIDE TOLUENE	J J	0.65 0.09	4.4 4.4	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-017-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	380	PQL	ug/Kg	J (all detects)
SL-021-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	370	PQL	ug/Kg	J (all detects)
SL-021-SA5B-SB-9.0-10	1-METHYLNAPHTHALENE 2-METHYLNAPHTHALENE ACENAPHTHENE CARBAZOLE CHRYSENE DIBENZOFURAN FLUORENE PHENANTHRENE PYRENE	J J J J J J J J J	23 22 82 97 44 64 68 77 21	190 190 190 190 190 190 190 190 190	PQL PQL PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-181-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	380	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE070 Laboratory: LL

EDD Filename: DE070_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-185-SA5B-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	38	190	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	32	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	34	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	19	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	380	PQL	ug/Kg	
	CHRYSENE	J	43	190	PQL	ug/Kg	
	FLUORANTHENE	J	68	190	PQL	ug/Kg	
	PHENANTHRENE	J	57	190	PQL	ug/Kg	
	PYRENE	J	84	190	PQL	ug/Kg	
SL-186-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	370	PQL	ug/Kg	J (all detects)
SL-192-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	370	PQL	ug/Kg	J (all detects)
SL-203-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5B-SB-4.0-5.0	ACENAPHTHYLENE	J	0.68	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.5	21	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.1	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.8	1.9	PQL	ug/Kg	
SL-017-SA5B-SB-9.0-10.0	ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.78	1.8	PQL	ug/Kg	
	FLUORENE	J	0.77	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.76	1.8	PQL	ug/Kg	
SL-021-SA5B-SB-4.0-5.0	DIBENZO(A,H)ANTHRACENE	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.6	20	PQL	ug/Kg	
	FLUORENE	J	1.7	1.9	PQL	ug/Kg	
SL-021-SA5B-SB-9.0-10	ACENAPHTHYLENE	J	0.41	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.79	1.9	PQL	ug/Kg	
SL-185-SA5B-SB-4.0-5.0	Di-n-butylphthalate	J	6.9	21	PQL	ug/Kg	J (all detects)
SL-186-SA5B-SB-4.0-5.0	Di-n-butylphthalate	J	6.9	20	PQL	ug/Kg	J (all detects)
SL-192-SA5B-SB-4.0-5.0	Di-n-butylphthalate	J	6.9	20	PQL	ug/Kg	J (all detects)
SL-203-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.89	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.93	1.9	PQL	ug/Kg	

LDC #: 25750U4 **VALIDATION COMPLETENESS WORKSHEET** Date: 11/4
SDG #: DE070 ADR
Laboratory: Lancaster Laboratories Reviewer: ER
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti, Zn > 4X)
VII.	Duplicate Sample Analysis	N	D (B, Cd, Hg, Se, Zr < 5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=11

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-017-SA5B-SB-4.0-5.0	11	EB27-SA5B-012711 ✓	21		31	
2	SL-017-SA5B-SB-9.0-10.0	12	(x10) MS	22		32	
3	SL-021-SA5B-SB-4.0-5.0	13	MSD	23		33	
4	SL-021-SA5B-SB-9.0-10.0	14	D	24		34	
5	SL-181-SA5B-SB-4.0-5.0	15		25		35	
6	SL-185-SA5B-SB-4.0-5.0	16		26		36	
7	SL-186-SA5B-SB-4.0-5.0	17		27		37	
8	SL-192-SA5B-SB-4.0-5.0	18		28		38	
9	SL-203-SA5B-SB-4.0-5.0	19		29		39	
10	SL-203-SA5B-SB-7.5-8.5	20		30		40	

Notes:

LDC #: 25750U 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 10

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	10														
Zr			6.1	3.05	2.4	2.8														

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2-9

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	2	4	5	6	7	8	9									
Zr			5.7	2.85	1.4	2.1	2.5	2.2	2.6	2.1	2.7									

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.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE070
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6193671BKG Serial Dilution Lab Sample ID: 6193671L
Batch ID(s): P02808D, P02826A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		174878.2800		168688.9000		4		P
Antimony	121	1.2240		2.0395	B	67		MS
Arsenic	75	39.0800		43.2350		11		MS
Barium	137	486.3000		523.5000		8		MS
Beryllium	9	3.7140		4.3620		17		MS
Boron		14.1900	B	44.5000	U	100		P
Cadmium	111	0.2895	B	1.2270	B	324		MS
Calcium		35206.5400		36815.3000		5		P
Chromium	52	126.3000		152.4000		21	E	MS
Cobalt	59	33.4800		43.7450		31	E	MS
Copper	63	54.1700		81.4000		50	E	MS
Iron		267134.3800		246398.8000		8		P
Lead	208	35.4200		37.0800		5		MS
Lithium		289.4300		298.7500		3		P
Magnesium		49370.6000		51738.5000		5		P
Manganese		1631.7100		1672.4000		2		P
Molybdenum	98	1.4450		1.7965	B	24		MS
Nickel	60	86.8300		110.4000		27	E	MS
Phosphorus		2574.6700		2613.8000		2		P
Potassium		13988.2700		14270.5500		2		P
Selenium	78	0.3917	B	1.0000	U	100		MS
Silver	107	0.2651	B	0.3000	U	100		MS
Sodium		2056.4300		2063.3500	B	0		P
Strontium		270.7800		275.2500		2		P
Thallium	203	2.0620		2.5095		22		MS
Tin		23.6900	B	50.0000	U	100		P
Titanium		12703.1200		13157.1500		4		P
Vanadium	51	190.6000		230.6000		21	E	MS
Zinc	66	271.7000		291.2000		7		MS
Zirconium		24.9600	B	61.2000	B	145		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

02078 4252

SAMPLE DELIVERY GROUP

DE071

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
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3050B	6010B	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3050B	6020	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3060A	7199	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3546	1625C	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3550B	8015B	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3550B	8015M	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3550B	8082	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3550B	8270C	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	3550B	8270C SIM	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	5035	8015M	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	5035	8260B	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	5035	8260B SIM	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	8330	8330A	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	Gen Prep	9045M	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	300.0	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	314.0	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	7471A	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	8015B	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	8015M	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	8315A	III
28-Jan-2011	SL-183-SA5B-SB-4.0-5.0	6194575	N	METHOD	9012B	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	3050B	6010B	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	3050B	6020	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	3060A	7199	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	3550B	8082	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	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
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	3550B	8270C SIM	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	5035	8260B	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	5035	8260B SIM	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	Gen Prep	9045M	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	METHOD	300.0	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	METHOD	314.0	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	METHOD	6850	III
28-Jan-2011	SL-196-SA5B-SB-4.0-5.0	6194579	N	METHOD	7471A	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3060A	7199	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3546	1625C	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3550B	8015B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3550B	8015M	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3550B	8082	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3550B	8270C	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	3550B	8270C SIM	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	5035	8015M	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	5035	8260B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	5035	8260B SIM	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	8330	8330A	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	Gen Prep	9045M	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	300.0	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	314.0	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	6850	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	8015B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	8015M	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	8315A	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0	6194576	N	METHOD	9012B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220448	DUP	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220651	DUP	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220736A	DUP	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220736B	DUP	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220736C	DUP	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220736D	DUP	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D220749	DUP	METHOD	7471A	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D221605A	DUP	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0DUP	P194576D222254	DUP	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220457	MSD	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220658	MSD	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220742A	MSD	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220742B	MSD	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220742C	MSD	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220742D	MSD	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M220753	MSD	METHOD	7471A	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M222301	MSD	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MSD	P194576M222308	MSD	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220452	MS	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220654	MS	3050B	6010B	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220739A	MS	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220739B	MS	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
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220739C	MS	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220739D	MS	3050B	6020	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R220750	MS	METHOD	7471A	III
28-Jan-2011	SL-184-SA5B-SB-3.0-4.0MS	P194576R222258	MS	3050B	6010B	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	3050B	6010B	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	3050B	6020	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	3060A	7199	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	3550B	8082	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	3550B	8270C	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	3550B	8270C SIM	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	5035	8260B	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	5035	8260B SIM	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	Gen Prep	9045M	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	METHOD	300.0	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	METHOD	314.0	III
28-Jan-2011	SL-193-SA5B-SB-4.0-5.0	6194577	N	METHOD	7471A	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	3050B	6010B	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	3050B	6020	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	3060A	7199	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	3550B	8082	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	3550B	8270C	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	3550B	8270C SIM	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	5035	8260B	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	5035	8260B SIM	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	Gen Prep	9045M	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	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
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	METHOD	314.0	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0	6194578	N	METHOD	7471A	III
28-Jan-2011	SL-194-SA5B-SB-4.0-5.0DUP	P194578D291150B	DUP	Gen Prep	9045M	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	3050B	6010B	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	3050B	6020	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	3060A	7199	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	3550B	8082	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	3550B	8270C	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	3550B	8270C SIM	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	5035	8260B	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	5035	8260B SIM	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	Gen Prep	9045M	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	METHOD	300.0	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	METHOD	314.0	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0	6194572	N	METHOD	7471A	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0DUP	P194572D271427A	DUP	METHOD	300.0	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0DUP	P194572D271851A	DUP	METHOD	314.0	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0MSD	P194572M261326	MSD	3550B	8270C SIM	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0MSD	P194572M261436	MSD	3550B	8270C	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0MS	P194572R261255	MS	3550B	8270C SIM	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0MS	P194572R261407	MS	3550B	8270C	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0MS	P194572R271442A	MS	METHOD	300.0	III
28-Jan-2011	SL-178-SA5B-SB-4.0-5.0MS	P194572R271914A	MS	METHOD	314.0	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	3050B	6010B	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	3050B	6020	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	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
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	3550B	8082	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	3550B	8270C	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	3550B	8270C SIM	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	Gen Prep	9045M	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	METHOD	300.0	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	METHOD	314.0	III
28-Jan-2011	SL-179-SA5B-SB-7.0-8.0	6194574	N	METHOD	7471A	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	3050B	6010B	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	3050B	6020	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	3060A	7199	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	3550B	8082	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	3550B	8270C	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	3550B	8270C SIM	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	5035	8260B	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	5035	8260B SIM	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	Gen Prep	9045M	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	METHOD	300.0	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	METHOD	314.0	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	METHOD	6850	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0	6194573	N	METHOD	7471A	III
28-Jan-2011	SL-179-SA5B-SB-4.0-5.0MS	P194573R210122A	MS	5035	8260B	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	3050B	6010B	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	3050B	6020	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	3060A	7199	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	3550B	8082	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	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
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	3550B	8270C SIM	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	5035	8260B	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	5035	8260B SIM	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	Gen Prep	9045M	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	METHOD	300.0	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	METHOD	314.0	III
28-Jan-2011	SL-201-SA5B-SB-4.0-5.0	6194580	N	METHOD	7471A	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	3050B	6010B	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	3050B	6020	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	3060A	7199	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	3550B	8082	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	3550B	8270C	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	3550B	8270C SIM	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	Gen Prep	9045M	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	METHOD	300.0	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	METHOD	314.0	III
28-Jan-2011	SL-201-SA5B-SB-9.0-10.0	6194581	N	METHOD	7471A	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	3050B	6010B	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	3050B	6020	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	3060A	7199	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	3550B	8082	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	3550B	8270C	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	3550B	8270C SIM	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	5035	8260B	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	5035	8260B SIM	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	Gen Prep	9045M	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
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	METHOD	300.0	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	METHOD	314.0	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0	6194582	N	METHOD	7471A	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0DUP	P194582D271735B	DUP	METHOD	300.0	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0DUP	P194582D272351B	DUP	METHOD	314.0	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0MS	P194582R270014B	MS	METHOD	314.0	III
28-Jan-2011	SL-202-SA5B-SB-4.0-5.0MS	P194582R271806B	MS	METHOD	300.0	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	3050B	6010B	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	3050B	6020	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	3060A	7199	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	3550B	8082	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	3550B	8270C	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	3550B	8270C SIM	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	Gen Prep	9045M	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	METHOD	300.0	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	N	METHOD	314.0	III
28-Jan-2011	SL-202-SA5B-SB-7.0-8.0	6194583	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: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *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		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
FLUORIDE	2.2		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
FLUORIDE	1.3		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
FLUORIDE	1.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *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		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
FLUORIDE	4.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
FLUORIDE	5.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
FLUORIDE	1.5		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 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
FLUORIDE	2.1		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
FLUORIDE	2.0		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.82	J	0.973	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1630		20.7	MDL	57.4	PQL	mg/Kg	J	Q

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.24	J	1.03	MDL	5.79	PQL	mg/Kg	J	Z
TIN	2.72	J	1.16	MDL	11.6	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
BORON	2.31	J	1.03	MDL	5.81	PQL	mg/Kg	J	Z
POTASSIUM	2120		20.9	MDL	58.1	PQL	mg/Kg	J	Q
SODIUM	83.1	J	43.4	MDL	116	PQL	mg/Kg	J	Z
TIN	2.65	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.97	J	0.977	MDL	5.81	PQL	mg/Kg	U	B

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
BORON	1.39	J	0.990	MDL	5.56	PQL	mg/Kg	J	Z
POTASSIUM	1440		20.0	MDL	55.6	PQL	mg/Kg	J	Q
SODIUM	96.4	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.57	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.48	J	0.934	MDL	5.56	PQL	mg/Kg	U	B

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
BORON	2.44	J	0.984	MDL	5.53	PQL	mg/Kg	J	Z
POTASSIUM	2640		19.9	MDL	55.3	PQL	mg/Kg	J	Q
SODIUM	74.4	J	41.2	MDL	111	PQL	mg/Kg	J	Z
TIN	2.05	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.08	J	0.929	MDL	5.53	PQL	mg/Kg	U	B

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.03	J	1.03	MDL	5.78	PQL	mg/Kg	J	Z
POTASSIUM	2580		20.8	MDL	57.8	PQL	mg/Kg	J	Q
TIN	2.74	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.17	J	0.970	MDL	5.78	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.16	J	1.04	MDL	5.84	PQL	mg/Kg	J	Z
POTASSIUM	1740		21.0	MDL	58.4	PQL	mg/Kg	J	Q
TIN	2.89	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	1.67	J	0.982	MDL	5.84	PQL	mg/Kg	U	B

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
BORON	2.45	J	1.01	MDL	5.68	PQL	mg/Kg	J	Z
POTASSIUM	1480		20.4	MDL	56.8	PQL	mg/Kg	J	Q
TIN	2.57	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.22	J	0.954	MDL	5.68	PQL	mg/Kg	U	B

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
BORON	1.73	J	0.977	MDL	5.49	PQL	mg/Kg	J	Z
POTASSIUM	1380		19.8	MDL	54.9	PQL	mg/Kg	J	Q
TIN	2.58	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.922	MDL	5.49	PQL	mg/Kg	U	B

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
BORON	2.82	J	1.02	MDL	5.72	PQL	mg/Kg	J	Z
POTASSIUM	2180		20.6	MDL	57.2	PQL	mg/Kg	J	Q
SODIUM	103	J	42.6	MDL	114	PQL	mg/Kg	J	Z
TIN	2.41	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.28	J	0.960	MDL	5.72	PQL	mg/Kg	U	B

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 2:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.92	J	0.916	MDL	5.45	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 2:00:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1930		19.6	MDL	54.5	PQL	mg/Kg	J	Q

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 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
BORON	1.21	J	0.971	MDL	5.45	PQL	mg/Kg	J	Z
TIN	2.71	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	1330		20.1	MDL	55.9	PQL	mg/Kg	J	Q
TIN	2.32	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.57	J	0.939	MDL	5.59	PQL	mg/Kg	U	B

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
POTASSIUM	1200		19.6	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.70	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.913	MDL	5.43	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.130		0.0454	MDL	0.114	PQL	mg/Kg	U	B

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0590	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0682	U	0.0682	MDL	0.227	PQL	mg/Kg	UJ	Q
ARSENIC	7.32		0.0909	MDL	0.454	PQL	mg/Kg	J	Q
COBALT	6.88		0.0227	MDL	0.114	PQL	mg/Kg	J	A
COPPER	8.43		0.0750	MDL	0.454	PQL	mg/Kg	J	A
LEAD	7.12		0.0118	MDL	0.227	PQL	mg/Kg	J	Q
NICKEL	15.9		0.114	MDL	0.454	PQL	mg/Kg	J	A
SILVER	0.0518	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:45:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.144		0.0447	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0671	U	0.0671	MDL	0.224	PQL	mg/Kg	UJ	Q
ARSENIC	5.61		0.0894	MDL	0.447	PQL	mg/Kg	J	Q
COBALT	5.99		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	9.33		0.0738	MDL	0.447	PQL	mg/Kg	J	A
LEAD	7.40		0.0116	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	13.0		0.112	MDL	0.447	PQL	mg/Kg	J	A
SILVER	0.0441	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 1:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0809	J	0.0441	MDL	0.110	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 1:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0661	U	0.0661	MDL	0.220	PQL	mg/Kg	UJ	Q
ARSENIC	4.18		0.0881	MDL	0.441	PQL	mg/Kg	J	Q
COBALT	3.44		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	8.68		0.0727	MDL	0.441	PQL	mg/Kg	J	A
LEAD	4.68		0.0115	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	9.98		0.110	MDL	0.441	PQL	mg/Kg	J	A
SILVER	0.0659	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.205		0.0451	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0677	U	0.0677	MDL	0.226	PQL	mg/Kg	UJ	Q
ARSENIC	3.98		0.0902	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	5.50		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	9.46		0.0744	MDL	0.451	PQL	mg/Kg	J	A
LEAD	5.77		0.0117	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	10.8		0.113	MDL	0.451	PQL	mg/Kg	J	A
SILVER	0.0229	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.170		0.0458	MDL	0.114	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0931	J	0.0686	MDL	0.229	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.17		0.0915	MDL	0.458	PQL	mg/Kg	J	Q
COBALT	5.84		0.0229	MDL	0.114	PQL	mg/Kg	J	A
COPPER	10.5		0.0755	MDL	0.458	PQL	mg/Kg	J	A
LEAD	9.83		0.0119	MDL	0.229	PQL	mg/Kg	J	Q
NICKEL	13.9		0.114	MDL	0.458	PQL	mg/Kg	J	A
SILVER	0.0643	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0534	J	0.0468	MDL	0.117	PQL	mg/Kg	U	B

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0701	U	0.0701	MDL	0.234	PQL	mg/Kg	UJ	Q
ARSENIC	5.26		0.0935	MDL	0.468	PQL	mg/Kg	J	Q
COBALT	5.65		0.0234	MDL	0.117	PQL	mg/Kg	J	A
COPPER	9.14		0.0772	MDL	0.468	PQL	mg/Kg	J	A
LEAD	5.09		0.0122	MDL	0.234	PQL	mg/Kg	J	Q
NICKEL	15.8		0.117	MDL	0.468	PQL	mg/Kg	J	A
SILVER	0.0236	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 12:03:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0846	J	0.0445	MDL	0.111	PQL	mg/Kg	U	B

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 12:03:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 12:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0668	U	0.0668	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	5.37		0.0891	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	5.52		0.0223	MDL	0.111	PQL	mg/Kg	J	A
COPPER	7.36		0.0735	MDL	0.445	PQL	mg/Kg	J	A
LEAD	6.38		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
NICKEL	13.9		0.111	MDL	0.445	PQL	mg/Kg	J	A
SILVER	0.0564	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:24:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0703	J	0.0452	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:24:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0989	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0678	U	0.0678	MDL	0.226	PQL	mg/Kg	UJ	Q
ARSENIC	6.23		0.0904	MDL	0.452	PQL	mg/Kg	J	Q
COBALT	5.00		0.0226	MDL	0.113	PQL	mg/Kg	J	A
COPPER	6.93		0.0746	MDL	0.452	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:24:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	6.44		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	12.5		0.113	MDL	0.452	PQL	mg/Kg	J	A
SILVER	0.0496	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0828	J	0.0448	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0990	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0673	U	0.0673	MDL	0.224	PQL	mg/Kg	UJ	Q
ARSENIC	5.20		0.0897	MDL	0.448	PQL	mg/Kg	J	Q
COBALT	7.30		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	8.16		0.0740	MDL	0.448	PQL	mg/Kg	J	A
LEAD	6.93		0.0117	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	14.6		0.112	MDL	0.448	PQL	mg/Kg	J	A
SILVER	0.0542	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 2:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0503	J	0.0436	MDL	0.109	PQL	mg/Kg	U	B

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 2:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0596	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 2:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0655	U	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q
ARSENIC	8.78		0.0873	MDL	0.436	PQL	mg/Kg	J	Q
COBALT	6.72		0.0218	MDL	0.109	PQL	mg/Kg	J	A
COPPER	14.5		0.0720	MDL	0.436	PQL	mg/Kg	J	A
LEAD	8.53		0.0113	MDL	0.218	PQL	mg/Kg	J	Q
NICKEL	16.6		0.109	MDL	0.436	PQL	mg/Kg	J	A
SILVER	0.0888	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0808	J	0.0447	MDL	0.112	PQL	mg/Kg	U	B

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.218	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0718	J	0.0671	MDL	0.224	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.74		0.0894	MDL	0.447	PQL	mg/Kg	J	Q
COBALT	12.3		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	8.26		0.0738	MDL	0.447	PQL	mg/Kg	J	A
LEAD	11.8		0.0116	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	13.9		0.112	MDL	0.447	PQL	mg/Kg	J	A
SILVER	0.0488	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 2:50:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0735	J	0.0426	MDL	0.107	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 2:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0947	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 2:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0738	J	0.0639	MDL	0.213	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.46		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
COBALT	7.05		0.0213	MDL	0.107	PQL	mg/Kg	J	A
COPPER	8.55		0.0703	MDL	0.426	PQL	mg/Kg	J	A
LEAD	7.30		0.0111	MDL	0.213	PQL	mg/Kg	J	Q
NICKEL	13.4		0.107	MDL	0.426	PQL	mg/Kg	J	A
SILVER	0.0749	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.47	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.49	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: PrepDE071_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *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-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.67	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.35	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.52	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
HEXAVALENT CHROMIUM	0.71	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: PrepDE071_v1 eQAPP Name: CDM_SSFL_110509

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

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

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
MERCURY	0.0047	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0081	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
MERCURY	0.0048	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
MERCURY	0.0050	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 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
MERCURY	0.0114	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0138	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
MERCURY	0.0203	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: PrepDE071_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	129	J	94.9	MDL	190	PQL	ng/Kg	J	Z

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

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* REA2S *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.66	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	3.6	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z, L

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *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	4.2		0.46	MDL	2.0	PQL	ug/Kg	J	S
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	6.2		1.2	MDL	3.9	PQL	ug/Kg	J	S, L

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *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	L
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 12:03:00 *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	1.2	J	0.45	MDL	1.9	PQL	ug/Kg	J	Z, S
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: PrepDE071_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 Matrix: SO

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C Matrix: SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: PrepDE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:45:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 1:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	390	PQL	ug/Kg	UJ	L

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 12:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:24:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-201-SA5B-SB-9.0-10.0 *Collected:* 1/28/2011 2:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	380	PQL	ug/Kg	UJ	L

Sample ID: SL-202-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 2:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Method Category: SVOA

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

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Diethylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	Q

Sample ID: SL-179-SA5B-SB-7.0-8.0 *Collected:* 1/28/2011 1:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	8.2	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *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(B)FLUORANTHENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: PrepDE071_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *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	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-178-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:04:00 *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	0.75	J	0.26	MDL	4.3	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-179-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:45:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.90	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-183-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:19:00 *Analysis Type:* RES *Dilution:* 0.79

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.65	J	0.22	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-184-SA5B-SB-3.0-4.0 *Collected:* 1/28/2011 10:29:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.87

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.55	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: PrepDE071_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-193-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 10:34:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.87	J	0.27	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: SL-194-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 12:03:00 *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.59	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-196-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 9:24:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.69	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-201-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 1:55:00 *Analysis Type:* RES *Dilution:* 0.84

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-202-SA5B-SB-4.0-5.0 *Collected:* 1/28/2011 2:44:00 *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	0.71	J	0.22	MDL	3.7	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: PrepDE071_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE071

Method Blank Outlier Report

Lab Reporting Batch ID: DE071 **Laboratory:** LL

EDD Filename: DE071_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03208CB220429	2/3/2011 4:29:00 AM	PHOSPHORUS TIN	1.61 mg/Kg 1.52 mg/Kg	SL-178-SA5B-SB-4.0-5.0 SL-179-SA5B-SB-4.0-5.0 SL-179-SA5B-SB-7.0-8.0 SL-183-SA5B-SB-4.0-5.0 SL-184-SA5B-SB-3.0-4.0 SL-193-SA5B-SB-4.0-5.0 SL-194-SA5B-SB-4.0-5.0 SL-196-SA5B-SB-4.0-5.0 SL-201-SA5B-SB-4.0-5.0 SL-201-SA5B-SB-9.0-10.0 SL-202-SA5B-SB-4.0-5.0 SL-202-SA5B-SB-7.0-8.0

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-178-SA5B-SB-4.0-5.0(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-179-SA5B-SB-4.0-5.0(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-179-SA5B-SB-7.0-8.0(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-183-SA5B-SB-4.0-5.0(RES)	TIN	2.05 mg/Kg	2.05U mg/Kg
SL-184-SA5B-SB-3.0-4.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-193-SA5B-SB-4.0-5.0(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-194-SA5B-SB-4.0-5.0(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-196-SA5B-SB-4.0-5.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-201-SA5B-SB-4.0-5.0(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-201-SA5B-SB-9.0-10.0(RES)	TIN	2.71 mg/Kg	2.71U mg/Kg
SL-202-SA5B-SB-4.0-5.0(RES)	TIN	2.32 mg/Kg	2.32U mg/Kg
SL-202-SA5B-SB-7.0-8.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03226AB220723A	2/11/2011 7:23:00 AM	CADMIUM	0.0671 mg/Kg	SL-178-SA5B-SB-4.0-5.0 SL-179-SA5B-SB-4.0-5.0 SL-179-SA5B-SB-7.0-8.0 SL-183-SA5B-SB-4.0-5.0 SL-184-SA5B-SB-3.0-4.0 SL-193-SA5B-SB-4.0-5.0 SL-194-SA5B-SB-4.0-5.0 SL-196-SA5B-SB-4.0-5.0 SL-201-SA5B-SB-4.0-5.0 SL-201-SA5B-SB-9.0-10.0 SL-202-SA5B-SB-4.0-5.0 SL-202-SA5B-SB-7.0-8.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **6020**
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-178-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.130 mg/Kg	0.130U mg/Kg
SL-179-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.144 mg/Kg	0.144U mg/Kg
SL-179-SA5B-SB-7.0-8.0(REA)	CADMIUM	0.0809 mg/Kg	0.0809U mg/Kg
SL-183-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.205 mg/Kg	0.205U mg/Kg
SL-184-SA5B-SB-3.0-4.0(REA)	CADMIUM	0.170 mg/Kg	0.170U mg/Kg
SL-193-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.0534 mg/Kg	0.0534U mg/Kg
SL-194-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.0846 mg/Kg	0.0846U mg/Kg
SL-196-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.0703 mg/Kg	0.0703U mg/Kg
SL-201-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.0828 mg/Kg	0.0828U mg/Kg
SL-201-SA5B-SB-9.0-10.0(REA)	CADMIUM	0.0503 mg/Kg	0.0503U mg/Kg
SL-202-SA5B-SB-4.0-5.0(REA)	CADMIUM	0.0808 mg/Kg	0.0808U mg/Kg
SL-202-SA5B-SB-7.0-8.0(REA)	CADMIUM	0.0735 mg/Kg	0.0735U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB62B211820A	2/1/2011 6:20:00 PM	METHYLENE CHLORIDE TOLUENE	0.96 ug/Kg 0.25 ug/Kg	SL-178-SA5B-SB-4.0-5.0 SL-179-SA5B-SB-4.0-5.0 SL-183-SA5B-SB-4.0-5.0 SL-193-SA5B-SB-4.0-5.0 SL-194-SA5B-SB-4.0-5.0 SL-196-SA5B-SB-4.0-5.0 SL-201-SA5B-SB-4.0-5.0 SL-202-SA5B-SB-4.0-5.0
VBLKB63B212141A	2/3/2011 9:41:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.12 ug/Kg 0.82 ug/Kg 0.13 ug/Kg	SL-184-SA5B-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-178-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.75 ug/Kg	4.3U ug/Kg
SL-178-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.10 ug/Kg	4.3U ug/Kg
SL-179-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.90 ug/Kg	4.2U ug/Kg
SL-179-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.13 ug/Kg	4.2U ug/Kg
SL-183-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	3.6U ug/Kg
SL-183-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.6U ug/Kg
SL-184-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.55 ug/Kg	4.1U ug/Kg
SL-184-SA5B-SB-3.0-4.0(RES)	TOLUENE	0.09 ug/Kg	4.1U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: DE071_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-193-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.87 ug/Kg	4.6U ug/Kg
SL-193-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.14 ug/Kg	4.6U ug/Kg
SL-194-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.59 ug/Kg	3.9U ug/Kg
SL-194-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	3.9U ug/Kg
SL-196-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.69 ug/Kg	3.8U ug/Kg
SL-196-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.8U ug/Kg
SL-201-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	3.9U ug/Kg
SL-201-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.9U ug/Kg
SL-202-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.71 ug/Kg	3.7U ug/Kg
SL-202-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.7U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_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-184-SA5B-SB-3.0-4.0MS **SL-184-SA5B-SB-3.0-4.0MSD** (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	ANTIMONY	18	14	75.00-125.00	-	ANTIMONY	J (all detects) UJ(all non-detects) Post Spike = 83%
SL-184-SA5B-SB-3.0-4.0MSD (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	ARSENIC LEAD	- -	48 70	75.00-125.00 75.00-125.00	- -	ARSENIC LEAD	J(all detects) UJ(all non-detects)
SL-184-SA5B-SB-3.0-4.0MS **SL-184-SA5B-SB-3.0-4.0MSD** (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	BARIUM	138	129	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-184-SA5B-SB-3.0-4.0MS **SL-184-SA5B-SB-3.0-4.0MSD** (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM	1979 170 1315 188 253 -	1785 159 1559 167 200 136	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM	J(all detects) Al, Ca, Fe, Mg, Mn No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: DE071_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-178-SA5B-SB-4.0-5.0MSD (SL-178-SA5B-SB-4.0-5.0)	Diethylphthalate	-	86	87.00-131.00	-	Diethylphthalate	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-178-SA5B-SB-4.0-5.0MS (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0)	FLUORIDE	49	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)
SL-202-SA5B-SB-4.0-5.0MS (SL-202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	FLUORIDE	29	-	80.00-120.00	-	FLUORIDE	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-184-SA5B-SB-3.0-4.0DUP (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	Zirconium	32	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-184-SA5B-SB-3.0-4.0DUP (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	ANTIMONY SILVER	200 26	20.00 20.00	No Qual OK by difference

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE071 Laboratory: LL

EDD Filename: DE071_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
P03226AQ220726A (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	ANTIMONY	55	-	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
P5LALCSQ261310 (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	3,3'-DICHLOROBENZIDINE	25	-	38.00-105.00	-	3,3'-DICHLOROBENZIDINE	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10355AQ241727A P10355AY241708A (SL-178-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-4.0-5.0 SL -179-SA5B-SB-7.0-8.0 SL -183-SA5B-SB-4.0-5.0 SL -184-SA5B-SB-3.0-4.0 SL -193-SA5B-SB-4.0-5.0 SL -194-SA5B-SB-4.0-5.0 SL -196-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-4.0-5.0 SL -201-SA5B-SB-9.0-10.0 SL -202-SA5B-SB-4.0-5.0 SL -202-SA5B-SB-7.0-8.0)	Aroclor 5442	64	67	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_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*
LCSB63Q212204A (SL-184-SA5B-SB-3.0-4.0)	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	66 79	- -	68.00-120.00 80.00-120.00	- -	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-178-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J (all detects)
SL-179-SA5B-SB-7.0-8.0	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)
SL-184-SA5B-SB-3.0-4.0	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
SL-193-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	127	45.00-120.00	All Target Analytes	J(all detects)
SL-194-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	122	45.00-120.00	All Target Analytes	J(all detects)
SL-201-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	J(all detects)
SL-201-SA5B-SB-9.0-10.0	DECACHLOROBIPHENYL	124	45.00-120.00	All Target Analytes	J(all detects)
SL-202-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-183-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	129	190	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-178-SA5B-SB-4.0-5.0	BORON	J	2.24	5.79	PQL	mg/Kg	J (all detects)
	TIN	J	2.72	11.6	PQL	mg/Kg	
	Zirconium	J	2.82	5.79	PQL	mg/Kg	
SL-179-SA5B-SB-4.0-5.0	BORON	J	2.31	5.81	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.1	116	PQL	mg/Kg	
	TIN	J	2.65	11.6	PQL	mg/Kg	
	Zirconium	J	1.97	5.81	PQL	mg/Kg	
SL-179-SA5B-SB-7.0-8.0	BORON	J	1.39	5.56	PQL	mg/Kg	J (all detects)
	SODIUM	J	96.4	111	PQL	mg/Kg	
	TIN	J	2.57	11.1	PQL	mg/Kg	
	Zirconium	J	1.48	5.56	PQL	mg/Kg	
SL-183-SA5B-SB-4.0-5.0	BORON	J	2.44	5.53	PQL	mg/Kg	J (all detects)
	SODIUM	J	74.4	111	PQL	mg/Kg	
	TIN	J	2.05	11.1	PQL	mg/Kg	
	Zirconium	J	2.08	5.53	PQL	mg/Kg	
SL-184-SA5B-SB-3.0-4.0	BORON	J	2.03	5.78	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	11.6	PQL	mg/Kg	
	Zirconium	J	2.17	5.78	PQL	mg/Kg	
SL-193-SA5B-SB-4.0-5.0	BORON	J	1.16	5.84	PQL	mg/Kg	J (all detects)
	TIN	J	2.89	11.7	PQL	mg/Kg	
	Zirconium	J	1.67	5.84	PQL	mg/Kg	
SL-194-SA5B-SB-4.0-5.0	BORON	J	2.45	5.68	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	11.4	PQL	mg/Kg	
	Zirconium	J	2.22	5.68	PQL	mg/Kg	
SL-196-SA5B-SB-4.0-5.0	BORON	J	1.73	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	11.0	PQL	mg/Kg	
	Zirconium	J	2.00	5.49	PQL	mg/Kg	
SL-201-SA5B-SB-4.0-5.0	BORON	J	2.82	5.72	PQL	mg/Kg	J (all detects)
	SODIUM	J	103	114	PQL	mg/Kg	
	TIN	J	2.41	11.4	PQL	mg/Kg	
	Zirconium	J	2.28	5.72	PQL	mg/Kg	
SL-201-SA5B-SB-9.0-10.0	BORON	J	1.21	5.45	PQL	mg/Kg	J (all detects)
	TIN	J	2.71	10.9	PQL	mg/Kg	
	Zirconium	J	1.92	5.45	PQL	mg/Kg	
SL-202-SA5B-SB-4.0-5.0	TIN	J	2.32	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.57	5.59	PQL	mg/Kg	
SL-202-SA5B-SB-7.0-8.0	TIN	J	2.70	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.42	5.43	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-178-SA5B-SB-4.0-5.0	SELENIUM	J	0.0590	0.454	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0518	0.114	PQL	mg/Kg	
SL-179-SA5B-SB-4.0-5.0	SELENIUM	J	0.118	0.447	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0441	0.112	PQL	mg/Kg	
SL-179-SA5B-SB-7.0-8.0	CADMIUM	J	0.0809	0.110	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0659	0.110	PQL	mg/Kg	
SL-183-SA5B-SB-4.0-5.0	SELENIUM	J	0.135	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0229	0.113	PQL	mg/Kg	
SL-184-SA5B-SB-3.0-4.0	ANTIMONY	J	0.0931	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.131	0.458	PQL	mg/Kg	
	SILVER	J	0.0643	0.114	PQL	mg/Kg	
SL-193-SA5B-SB-4.0-5.0	CADMIUM	J	0.0534	0.117	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.468	PQL	mg/Kg	
	SILVER	J	0.0236	0.117	PQL	mg/Kg	
SL-194-SA5B-SB-4.0-5.0	CADMIUM	J	0.0846	0.111	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.127	0.445	PQL	mg/Kg	
	SILVER	J	0.0564	0.111	PQL	mg/Kg	
SL-196-SA5B-SB-4.0-5.0	CADMIUM	J	0.0703	0.113	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0989	0.452	PQL	mg/Kg	
	SILVER	J	0.0496	0.113	PQL	mg/Kg	
SL-201-SA5B-SB-4.0-5.0	CADMIUM	J	0.0828	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0990	0.448	PQL	mg/Kg	
	SILVER	J	0.0542	0.112	PQL	mg/Kg	
SL-201-SA5B-SB-9.0-10.0	CADMIUM	J	0.0503	0.109	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0596	0.436	PQL	mg/Kg	
	SILVER	J	0.0888	0.109	PQL	mg/Kg	
SL-202-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0718	0.224	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0808	0.112	PQL	mg/Kg	
	SELENIUM	J	0.218	0.447	PQL	mg/Kg	
	SILVER	J	0.0488	0.112	PQL	mg/Kg	
SL-202-SA5B-SB-7.0-8.0	ANTIMONY	J	0.0738	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0735	0.107	PQL	mg/Kg	
	SELENIUM	J	0.0947	0.426	PQL	mg/Kg	
	SILVER	J	0.0749	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-178-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.65	1.2	PQL	mg/Kg	J (all detects)
SL-179-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-179-SA5B-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-183-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)
SL-184-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.47	1.2	PQL	mg/Kg	J (all detects)
SL-193-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.67	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-194-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.35	1.1	PQL	mg/Kg	J (all detects)
SL-196-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-201-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-201-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-202-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)
SL-202-SA5B-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.71	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-179-SA5B-SB-7.0-8.0	MERCURY	J	0.0047	0.112	PQL	mg/Kg	J (all detects)
SL-184-SA5B-SB-3.0-4.0	MERCURY	J	0.0081	0.116	PQL	mg/Kg	J (all detects)
SL-194-SA5B-SB-4.0-5.0	MERCURY	J	0.0048	0.111	PQL	mg/Kg	J (all detects)
SL-196-SA5B-SB-4.0-5.0	MERCURY	J	0.0050	0.107	PQL	mg/Kg	J (all detects)
SL-201-SA5B-SB-9.0-10.0	MERCURY	J	0.0114	0.112	PQL	mg/Kg	J (all detects)
SL-202-SA5B-SB-4.0-5.0	MERCURY	J	0.0138	0.107	PQL	mg/Kg	J (all detects)
SL-202-SA5B-SB-7.0-8.0	MERCURY	J	0.0203	0.104	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-183-SA5B-SB-4.0-5.0	EFH (C21-C30)	J	0.66	1.4	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-179-SA5B-SB-4.0-5.0	Aroclor 5460	J	3.6	3.8	PQL	ug/Kg	J (all detects)
SL-194-SA5B-SB-4.0-5.0	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE071 **Laboratory: LL**

EDD Filename: DE071_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-178-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.75	4.3	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.10	4.3	PQL	ug/Kg	
SL-179-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.90	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.13	4.2	PQL	ug/Kg	
SL-183-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.65	3.6	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	3.6	PQL	ug/Kg	
SL-184-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.55	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.1	PQL	ug/Kg	
SL-193-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.87	4.6	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.14	4.6	PQL	ug/Kg	
SL-194-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.59	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	3.9	PQL	ug/Kg	
SL-196-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.69	3.8	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.8	PQL	ug/Kg	
SL-201-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.4	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	3.9	PQL	ug/Kg	
SL-202-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.71	3.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	3.7	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-179-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	390	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-179-SA5B-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.2	21	PQL	ug/Kg	J (all detects)
SL-183-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.3	1.9	PQL	ug/Kg	
SL-184-SA5B-SB-3.0-4.0	BENZO(A)ANTHRACENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.7	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.9	PQL	ug/Kg	

LDC #: 25750V4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/4/11
SDG #: DE071 ADR
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Zn 7K)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Ag, Zr <5xRL)
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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: 50,1

1	SL-178-SA5B-SB-4.0-5.0	11	SL-202-SA5B-SB-4.0-5.0	21		31	
2	SL-179-SA5B-SB-4.0-5.0	12	SL-202-SA5B-SB-7.0-8.0	22		32	
3	SL-179-SA5B-SB-7.0-8.0	13	(MS) MS	23		33	
4	SL-183-SA5B-SB-4.0-5.0	14	MSD	24		34	
5	SL-184-SA5B-SB-3.0-4.0	15	DUP	25		35	
6	SL-193-SA5B-SB-4.0-5.0	16		26		36	
7	SL-194-SA5B-SB-4.0-5.0	17		27		37	
8	SL-196-SA5B-SB-4.0-5.0	18		28		38	
9	SL-201-SA5B-SB-4.0-5.0	19		29		39	
10	SL-201-SA5B-SB-9.0-10.0	20		30		40	

Notes:

LDC #: 25750V 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2-12

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	2	3	4	5	6	7	8	9	10	11	12						
Zr			5.7	2.85	2.0	1.5	2.1	2.2	1.7	2.2	2.0	2.3	1.9	2.6	2.4						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qual																
Zr			4.7	2.35																	

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

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					
Sb			0.49	0.49					0.093						0.072	0.074					
Cd			0.29	0.29	0.13	0.14	0.081	0.20	0.17	0.053	0.085	0.070	0.083	0.050	0.081	0.073					

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.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE071
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6194576BKG Serial Dilution Lab Sample ID: 6194576L
Batch ID(s): P03208C, P03226A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		177308.0400		173061.2500		2		P
Antimony	121	0.4068	B	1.5000	U	100		MS
Arsenic	75	26.9600		23.8100		12		MS
Barium	137	485.6000		513.5000		6		MS
Beryllium	9	3.2850		3.5855		9		MS
Boron		17.5900	B	44.5000	U	100		P
Cadmium	111	0.7426		1.0000	U	100		MS
Calcium		5542.2300		5488.9000		1		P
Chromium	52	102.1000		108.6500		6		MS
Cobalt	59	25.5100		28.6650		12	E	MS
Copper	63	46.0700		53.1000		15	E	MS
Iron		207413.0600		203540.7000		2		P
Lead	208	42.9600		42.6800		1		MS
Lithium		43.8400		44.9500	B	3		P
Magnesium		7804.3500		7729.4500		1		P
Manganese		2340.0400		2438.9000		4		P
Molybdenum	98	2.1140		2.8205		33		MS
Nickel	60	60.8800		68.2000		12	E	MS
Phosphorus		1916.1600		1957.4000		2		P
Selenium	78	0.5733	B	1.0000	U	100		MS
Silver	107	0.2812	B	0.3790	B	35		MS
Sodium		1065.7200		1865.0000	U	100		P
Strontium		236.4800		242.9500		3		P
Thallium	203	1.2020		1.1915	B	1		MS
Tin		23.7300	B	50.0000	U	100		P
Vanadium	51	179.6000		192.1000		7		MS
Zinc	66	224.6000		234.3500		4		MS
Zirconium		18.8000	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE071 3883

SAMPLE DELIVERY GROUP

DE072

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
01-Feb-2011	TB-020111	6196812	TB	5030B	8260B	III
01-Feb-2011	TB-020111	6196812	TB	5030B	8260B SIM	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	3050B	6010B	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	3050B	6020	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	3060A	7199	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	3550B	8082	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	3550B	8270C	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	3550B	8270C SIM	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	5035	8260B	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	5035	8260B SIM	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	Gen Prep	9045M	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	METHOD	300.0	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	METHOD	314.0	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	METHOD	6850	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0	6196805	N	METHOD	7471A	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0MSD	P196805M241804A	MSD	METHOD	6850	III
01-Feb-2011	SL-189-SA5B-SB-3.0-4.0MS	P196805R241757A	MS	METHOD	6850	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	3050B	6010B	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	3050B	6020	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	3060A	7199	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	3550B	8082	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	3550B	8270C	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	3550B	8270C SIM	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	5035	8260B	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	5035	8260B SIM	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	Gen Prep	9045M	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
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	METHOD	300.0	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	METHOD	314.0	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0	6196808	N	METHOD	7471A	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0DUP	P196808D271133A	DUP	3060A	7199	III
01-Feb-2011	SL-276-SA5B-SB-4.0-5.0MS	P196808R272026A	MS	3060A	7199	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	3050B	6010B	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	3050B	6020	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	3060A	7199	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	3550B	8082	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	3550B	8270C	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	3550B	8270C SIM	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	5035	8260B	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	5035	8260B SIM	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	Gen Prep	9045M	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	METHOD	300.0	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	METHOD	314.0	III
01-Feb-2011	SL-188-SA5B-SB-4.0-5.0	6196804	N	METHOD	7471A	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	3050B	6010B	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	3050B	6020	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	3060A	7199	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	3550B	8082	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	3550B	8270C	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	3550B	8270C SIM	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	5035	8260B	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	5035	8260B SIM	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	Gen Prep	9045M	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
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	METHOD	300.0	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	METHOD	314.0	III
01-Feb-2011	SL-277-SA5B-SB-2.5-3.5	6196809	N	METHOD	7471A	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	3050B	6010B	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	3050B	6020	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	3060A	7199	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	3550B	8082	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	3550B	8270C	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	3550B	8270C SIM	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	5035	8260B	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	5035	8260B SIM	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	Gen Prep	9045M	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	METHOD	300.0	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	METHOD	314.0	III
01-Feb-2011	SL-190-SA5B-SB-4.0-5.0	6196806	N	METHOD	7471A	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	3050B	6010B	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	3060A	7199	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	3550B	8082	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	3550B	8270C	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	3550B	8270C SIM	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	5035	8260B	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	5035	8260B SIM	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	Gen Prep	9045M	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	METHOD	300.0	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	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
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0	6196803	N	METHOD	7471A	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D220007A	DUP	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D220007B	DUP	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D220007C	DUP	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D220007D	DUP	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D220151	DUP	3050B	6010B	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D220859A	DUP	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D221803	DUP	METHOD	7471A	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D270814A	DUP	METHOD	300.0	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0DUP	P196803D291330A	DUP	Gen Prep	9045M	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M220013A	MSD	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M220013B	MSD	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M220013C	MSD	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M220013D	MSD	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M220159	MSD	3050B	6010B	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M220903A	MSD	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M221805	MSD	METHOD	7471A	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MSD	P196803M240206A	MSD	3550B	8082	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R220010A	MS	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R220010B	MS	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R220010C	MS	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R220010D	MS	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R220155	MS	3050B	6010B	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R220901A	MS	3050B	6020	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R221804	MS	METHOD	7471A	III
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R240147A	MS	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
01-Feb-2011	SL-187-SA5B-SB-4.0-5.0MS	P196803R270830A	MS	METHOD	300.0	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	3050B	6010B	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	3050B	6020	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	3060A	7199	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	3550B	8082	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	3550B	8270C	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	3550B	8270C SIM	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	5035	8260B	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	5035	8260B SIM	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	Gen Prep	9045M	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	METHOD	300.0	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	METHOD	314.0	III
01-Feb-2011	SL-278-SA5B-SB-2.0-3.0	6196810	N	METHOD	7471A	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	3050B	6010B	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	3050B	6020	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	3060A	7199	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	3550B	8082	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	3550B	8270C	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	3550B	8270C SIM	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	5035	8260B	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	5035	8260B SIM	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	Gen Prep	9045M	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	METHOD	300.0	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	METHOD	314.0	III
01-Feb-2011	SL-191-SA5B-SB-4.0-5.0	6196807	N	METHOD	7471A	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	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
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	3050B	6020	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	3060A	7199	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	3550B	8082	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	3550B	8270C	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	3550B	8270C SIM	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	5035	8260B	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	5035	8260B SIM	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	Gen Prep	9045M	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	METHOD	300.0	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	N	METHOD	314.0	III
01-Feb-2011	SL-279-SA5B-SB-2.5-3.5	6196811	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: DE072 Laboratory: LL

EDD Filename: DE072_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	11.5		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.7		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	20.8		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	13.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.9		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.4		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.0	J	0.90	MDL	1.1	PQL	mg/Kg	J	Z, Q

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	15.6	J	9.6	MDL	32.1	PQL	ug/Kg	J	Z

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	13.4	J	10.2	MDL	33.9	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2280		6.37	MDL	20.8	PQL	mg/Kg	J	E
PHOSPHORUS	291		0.581	MDL	10.4	PQL	mg/Kg	J	Q
TIN	2.40	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.68	J	0.872	MDL	5.19	PQL	mg/Kg	U	B

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.23	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	9860		6.66	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	293		0.608	MDL	10.9	PQL	mg/Kg	J	Q
TIN	2.53	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.13	J	0.912	MDL	5.43	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.05	J	0.964	MDL	5.42	PQL	mg/Kg	J	Z
CALCIUM	12400		6.64	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	264		0.607	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.59	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.68	J	0.910	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.73	J	0.966	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	2850		6.65	MDL	21.7	PQL	mg/Kg	J	E
PHOSPHORUS	72.0		0.608	MDL	10.9	PQL	mg/Kg	J	Q
TIN	2.84	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.39	J	0.912	MDL	5.43	PQL	mg/Kg	U	B

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3110		6.60	MDL	21.5	PQL	mg/Kg	J	E
PHOSPHORUS	257		0.603	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.66	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.60	J	0.904	MDL	5.38	PQL	mg/Kg	U	B

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2140		6.63	MDL	21.6	PQL	mg/Kg	J	E
PHOSPHORUS	254		0.605	MDL	10.8	PQL	mg/Kg	J	Q
SODIUM	93.9	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.56	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.63	J	0.908	MDL	5.40	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 Laboratory: LL

EDD Filename: DE072_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.36	J	0.960	MDL	5.40	PQL	mg/Kg	J	Z
CALCIUM	2270		6.62	MDL	21.6	PQL	mg/Kg	J	E
PHOSPHORUS	193		0.604	MDL	10.8	PQL	mg/Kg	J	Q
SODIUM	95.0	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.65	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.24	J	0.907	MDL	5.40	PQL	mg/Kg	U	B

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	1660		6.60	MDL	21.5	PQL	mg/Kg	J	E
PHOSPHORUS	193		0.603	MDL	10.8	PQL	mg/Kg	J	Q
SODIUM	103	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	3.01	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.905	MDL	5.39	PQL	mg/Kg	U	B

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2670		6.62	MDL	21.6	PQL	mg/Kg	J	E
PHOSPHORUS	266		0.605	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.75	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.59	J	0.907	MDL	5.40	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.112	MDL	0.415	PQL	mg/Kg	J	E

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	16.1		0.126	MDL	0.419	PQL	mg/Kg	J	A

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0774	J	0.0623	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	7.10		0.0831	MDL	0.415	PQL	mg/Kg	J	Q
COBALT	5.19		0.0208	MDL	0.104	PQL	mg/Kg	J	A
LEAD	4.26		0.0108	MDL	0.208	PQL	mg/Kg	J	Q
NICKEL	10.6		0.104	MDL	0.415	PQL	mg/Kg	J	A
VANADIUM	36.1		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, A

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0447	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	88.2		0.117	MDL	0.434	PQL	mg/Kg	J	E

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	30.1		0.133	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.138	J	0.0652	MDL	0.217	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	6.50		0.0869	MDL	0.434	PQL	mg/Kg	J	Q
COBALT	5.37		0.0217	MDL	0.109	PQL	mg/Kg	J	A
LEAD	5.17		0.0113	MDL	0.217	PQL	mg/Kg	J	Q
NICKEL	19.1		0.109	MDL	0.434	PQL	mg/Kg	J	A
SILVER	0.0798	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	41.7		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0518	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* REA3 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	224		0.290	MDL	1.07	PQL	mg/Kg	J	E

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	14.6		0.129	MDL	0.429	PQL	mg/Kg	J	A

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0644	U	0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q
ARSENIC	5.14		0.0858	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	5.08		0.0215	MDL	0.107	PQL	mg/Kg	J	A
LEAD	3.97		0.0112	MDL	0.215	PQL	mg/Kg	J	Q
NICKEL	11.1		0.107	MDL	0.429	PQL	mg/Kg	J	A
SILVER	0.0411	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	30.6		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0475	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	103		0.120	MDL	0.443	PQL	mg/Kg	J	E

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	22.3		0.130	MDL	0.434	PQL	mg/Kg	J	A

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0664	U	0.0664	MDL	0.221	PQL	mg/Kg	UJ	Q
ARSENIC	6.06		0.0885	MDL	0.443	PQL	mg/Kg	J	Q
COBALT	4.56		0.0221	MDL	0.111	PQL	mg/Kg	J	A
LEAD	5.76		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	10.8		0.111	MDL	0.443	PQL	mg/Kg	J	A
SILVER	0.103	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	39.5		0.0243	MDL	0.111	PQL	mg/Kg	J	Q, A

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0924	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.114	MDL	0.422	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	19.8		0.128	MDL	0.426	PQL	mg/Kg	J	A

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	6.04		0.0844	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	5.34		0.0211	MDL	0.106	PQL	mg/Kg	J	A
LEAD	5.67		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	13.6		0.106	MDL	0.422	PQL	mg/Kg	J	A
SILVER	0.0195	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	44.9		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, A

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	74.8		0.117	MDL	0.432	PQL	mg/Kg	J	E

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	15.1		0.126	MDL	0.420	PQL	mg/Kg	J	A

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0786	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	4.62		0.0865	MDL	0.432	PQL	mg/Kg	J	Q
CADMIUM	0.0680	J	0.0432	MDL	0.108	PQL	mg/Kg	J	Z
COBALT	5.24		0.0216	MDL	0.108	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.37		0.0112	MDL	0.216	PQL	mg/Kg	J	Q
NICKEL	9.89		0.108	MDL	0.432	PQL	mg/Kg	J	A
SILVER	0.0177	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	36.0		0.0238	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0607	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.6		0.119	MDL	0.440	PQL	mg/Kg	J	E

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	18.1		0.130	MDL	0.432	PQL	mg/Kg	J	A

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0680	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	5.11		0.0880	MDL	0.440	PQL	mg/Kg	J	Q
CADMIUM	0.0507	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z
COBALT	4.51		0.0220	MDL	0.110	PQL	mg/Kg	J	A
LEAD	5.50		0.0114	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	9.93		0.110	MDL	0.440	PQL	mg/Kg	J	A
SILVER	0.0391	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	33.0		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.105	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	70.9		0.116	MDL	0.431	PQL	mg/Kg	J	E

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	15.4		0.131	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0646	U	0.0646	MDL	0.215	PQL	mg/Kg	UJ	Q
ARSENIC	5.18		0.0862	MDL	0.431	PQL	mg/Kg	J	Q
COBALT	3.90		0.0215	MDL	0.108	PQL	mg/Kg	J	A
LEAD	5.22		0.0112	MDL	0.215	PQL	mg/Kg	J	Q
NICKEL	8.15		0.108	MDL	0.431	PQL	mg/Kg	J	A
SILVER	0.0165	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	31.2		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 PM *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0626	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 PM *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	78.1		0.115	MDL	0.428	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 Laboratory: LL

EDD Filename: DE072_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 PM *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	16.6		0.127	MDL	0.424	PQL	mg/Kg	J	A

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0642	U	0.0642	MDL	0.214	PQL	mg/Kg	UJ	Q
ARSENIC	5.28		0.0855	MDL	0.428	PQL	mg/Kg	J	Q
COBALT	5.61		0.0214	MDL	0.107	PQL	mg/Kg	J	A
LEAD	4.71		0.0111	MDL	0.214	PQL	mg/Kg	J	Q
NICKEL	8.62		0.107	MDL	0.428	PQL	mg/Kg	J	A
SILVER	0.0176	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	30.5		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 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	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 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	0.25	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0360	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-279-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 2:57:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 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
Dimethylphthalate	35	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *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	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *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	9.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 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	7.7	J	6.6	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.47	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *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	0.65	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 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	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.74	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.4	J	6.5	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.91	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 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
FLUORANTHENE	0.76	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.79	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.87	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 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	8.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 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-METHYLNAPHTHALENE	0.94	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.8	J	6.6	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-187-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 12:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.3	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.3	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.46	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-188-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 10:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.3	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.3	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.69	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory:** LL

EDD Filename: DE072_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-189-SA5B-SB-3.0-4.0 *Collected:* 2/1/2011 9:04:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.17	U	0.17	MDL	3.9	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.43	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-190-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 11:26:00 *Analysis Type:* RES *Dilution:* 0.77

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.44	J	0.21	MDL	3.5	PQL	ug/Kg	U	B
TOLUENE	0.07	J	0.07	MDL	3.5	PQL	ug/Kg	U	B

Sample ID: SL-191-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 2:42:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.1	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.48	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-276-SA5B-SB-4.0-5.0 *Collected:* 2/1/2011 9:48:00 AM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.3	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.3	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.46	J	0.06	MDL	4.3	PQL	ug/Kg	J	Z
m,p-Xylene	1.7	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.44	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-277-SA5B-SB-2.5-3.5 *Collected:* 2/1/2011 10:57:00 *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	0.42	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-278-SA5B-SB-2.0-3.0 *Collected:* 2/1/2011 1:28:00 PM *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1.02

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.20	U	0.20	MDL	4.5	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-278-SA5B-SB-2.0-3.0** ***Collected:*** **2/1/2011 1:28:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
CIS-1,3-DICHLOROPROPENE	0.18	U	0.18	MDL	4.5	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.63	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: **SL-279-SA5B-SB-2.5-3.5** ***Collected:*** **2/1/2011 2:57:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.91**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	0.52	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE072

Method Blank Outlier Report

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03308BB220132	2/9/2011 1:32:00 AM	PHOSPHORUS TIN	0.991 mg/Kg 1.29 mg/Kg	SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5

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-187-SA5B-SB-4.0-5.0(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-188-SA5B-SB-4.0-5.0(RES)	TIN	2.53 mg/Kg	2.53U mg/Kg
SL-189-SA5B-SB-3.0-4.0(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-190-SA5B-SB-4.0-5.0(RES)	TIN	2.84 mg/Kg	2.84U mg/Kg
SL-191-SA5B-SB-4.0-5.0(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-276-SA5B-SB-4.0-5.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-277-SA5B-SB-2.5-3.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-278-SA5B-SB-2.0-3.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-279-SA5B-SB-2.5-3.5(RES)	TIN	2.75 mg/Kg	2.75U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB63B212141A	2/3/2011 9:41:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.12 ug/Kg 0.82 ug/Kg 0.13 ug/Kg	SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-278-SA5B-SB-2.0-3.0
VBLKB64B211500A	2/4/2011 3:00:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	7.5 ug/Kg 0.79 ug/Kg 0.53 ug/Kg	SL-190-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-279-SA5B-SB-2.5-3.5

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-187-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	4.3U ug/Kg
SL-188-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.69 ug/Kg	4.3U ug/Kg
SL-189-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	3.9U ug/Kg
SL-190-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.44 ug/Kg	3.5U ug/Kg
SL-190-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.07 ug/Kg	3.5U ug/Kg
SL-191-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	4.1U ug/Kg
SL-276-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.44 ug/Kg	4.3U ug/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_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-277-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.42 ug/Kg	3.9U ug/Kg
SL-278-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	4.5U ug/Kg
SL-279-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	4.0U ug/Kg
SL-279-SA5B-SB-2.5-3.5(RES)	TOLUENE	0.08 ug/Kg	4.0U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_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-187-SA5B-SB-4.0-5.0MS SL-187-SA5B-SB-4.0-5.0MSD (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	ARSENIC LEAD VANADIUM ZINC	151 132 174 -	- - - 133	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ARSENIC LEAD VANADIUM ZINC	J (all detects) Zn No Qual, >4x
SL-187-SA5B-SB-4.0-5.0MS SL-187-SA5B-SB-4.0-5.0MSD (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	ANTIMONY	44	49	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-187-SA5B-SB-4.0-5.0MS SL-187-SA5B-SB-4.0-5.0MSD (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	BARIUM	-371	-354	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-187-SA5B-SB-4.0-5.0MS SL-187-SA5B-SB-4.0-5.0MSD (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	ALUMINUM CALCIUM PHOSPHORUS	228 152 -	260 237 161	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM CALCIUM PHOSPHORUS	J(all detects) Al, Ca No Qual, >4x
SL-187-SA5B-SB-4.0-5.0MS SL-187-SA5B-SB-4.0-5.0MSD (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	IRON MAGNESIUM	-1764 -40	-1450 -34	75.00-125.00 75.00-125.00	- -	IRON MAGNESIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE072 | Laboratory: LL

EDD Filename: DE072_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-187-SA5B-SB-4.0-5.0MS SL-187-SA5B-SB-4.0-5.0MSD (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	MANGANESE TITANIUM	48 69	68 149	75.00-125.00 75.00-125.00	- -	MANGANESE TITANIUM	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-187-SA5B-SB-4.0-5.0MS (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	FLUORIDE	54	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE072 Laboratory: LL

EDD Filename: DE072_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-187-SA5B-SB-4.0-5.0DUP (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	CALCIUM	26	20.00	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-187-SA5B-SB-4.0-5.0DUP	ANTIMONY	200	20.00	J(all detects) UJ(all non-detects) Sb, Cd, Se No Qual OK by difference
(SL-187-SA5B-SB-4.0-5.0	BARIUM	32	20.00	
SL-188-SA5B-SB-4.0-5.0	CADMIUM	200	20.00	
SL-189-SA5B-SB-3.0-4.0	SELENIUM	21	20.00	
SL-190-SA5B-SB-4.0-5.0				
SL-191-SA5B-SB-4.0-5.0				
SL-276-SA5B-SB-4.0-5.0				
SL-277-SA5B-SB-2.5-3.5				
SL-278-SA5B-SB-2.0-3.0				
SL-279-SA5B-SB-2.5-3.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE072 Laboratory: LL

EDD Filename: DE072_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
P10356AQ240110A P10356AY240052A (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-190-SA5B-SB-4.0-5.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-277-SA5B-SB-2.5-3.5 SL-278-SA5B-SB-2.0-3.0 SL-279-SA5B-SB-2.5-3.5)	Aroclor 5442	72	63	75.00-125.00	-	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB63Q212204A (SL-187-SA5B-SB-4.0-5.0 SL-188-SA5B-SB-4.0-5.0 SL-189-SA5B-SB-3.0-4.0 SL-191-SA5B-SB-4.0-5.0 SL-276-SA5B-SB-4.0-5.0 SL-278-SA5B-SB-2.0-3.0)	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	66 79	- -	68.00-120.00 80.00-120.00	- -	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE072 Laboratory: LL

EDD Filename: DE072_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-277-SA5B-SB-2.5-3.5	FLUORIDE	J	1.0	1.1	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-187-SA5B-SB-4.0-5.0	PERCHLORATE	J	15.6	32.1	PQL	ug/Kg	J (all detects)
SL-190-SA5B-SB-4.0-5.0	PERCHLORATE	J	13.4	33.9	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-187-SA5B-SB-4.0-5.0	TIN	J	2.40	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.68	5.19	PQL	mg/Kg	
SL-188-SA5B-SB-4.0-5.0	BORON	J	1.23	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.53	10.9	PQL	mg/Kg	
	Zirconium	J	2.13	5.43	PQL	mg/Kg	
SL-189-SA5B-SB-3.0-4.0	BORON	J	1.05	5.42	PQL	mg/Kg	J (all detects)
	TIN	J	2.59	10.8	PQL	mg/Kg	
	Zirconium	J	1.68	5.42	PQL	mg/Kg	
SL-190-SA5B-SB-4.0-5.0	BORON	J	1.73	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.84	10.9	PQL	mg/Kg	
	Zirconium	J	2.39	5.43	PQL	mg/Kg	
SL-191-SA5B-SB-4.0-5.0	TIN	J	2.66	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.60	5.38	PQL	mg/Kg	
SL-276-SA5B-SB-4.0-5.0	SODIUM	J	93.9	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.8	PQL	mg/Kg	
	Zirconium	J	1.63	5.40	PQL	mg/Kg	
SL-277-SA5B-SB-2.5-3.5	BORON	J	1.36	5.40	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.0	108	PQL	mg/Kg	
	TIN	J	2.65	10.8	PQL	mg/Kg	
	Zirconium	J	2.24	5.40	PQL	mg/Kg	
SL-278-SA5B-SB-2.0-3.0	SODIUM	J	103	108	PQL	mg/Kg	J (all detects)
	TIN	J	3.01	10.8	PQL	mg/Kg	
	Zirconium	J	2.33	5.39	PQL	mg/Kg	
SL-279-SA5B-SB-2.5-3.5	TIN	J	2.75	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.59	5.40	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-187-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0774	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.415	PQL	mg/Kg	
SL-188-SA5B-SB-4.0-5.0	ANTIMONY	J	0.138	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0447	0.434	PQL	mg/Kg	
	SILVER	J	0.0798	0.109	PQL	mg/Kg	
SL-189-SA5B-SB-3.0-4.0	SELENIUM	J	0.0518	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0411	0.107	PQL	mg/Kg	
SL-190-SA5B-SB-4.0-5.0	SELENIUM	J	0.0475	0.443	PQL	mg/Kg	J (all detects)
	SILVER	J	0.103	0.111	PQL	mg/Kg	
SL-191-SA5B-SB-4.0-5.0	ANTIMONY	J	0.134	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0924	0.422	PQL	mg/Kg	
	SILVER	J	0.0195	0.106	PQL	mg/Kg	
SL-276-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0786	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0680	0.108	PQL	mg/Kg	
	SELENIUM	J	0.104	0.432	PQL	mg/Kg	
	SILVER	J	0.0177	0.108	PQL	mg/Kg	
SL-277-SA5B-SB-2.5-3.5	ANTIMONY	J	0.0680	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0507	0.110	PQL	mg/Kg	
	SELENIUM	J	0.0607	0.440	PQL	mg/Kg	
	SILVER	J	0.0391	0.110	PQL	mg/Kg	
SL-278-SA5B-SB-2.0-3.0	SELENIUM	J	0.105	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0165	0.108	PQL	mg/Kg	
SL-279-SA5B-SB-2.5-3.5	SELENIUM	J	0.0626	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0176	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-277-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-278-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-279-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-278-SA5B-SB-2.0-3.0	MERCURY	J	0.0360	0.107	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-187-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.46	4.3	PQL	ug/Kg	J (all detects)
SL-188-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.69	4.3	PQL	ug/Kg	J (all detects)
SL-189-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.43	3.9	PQL	ug/Kg	J (all detects)
SL-190-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.44 0.07	3.5 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-191-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.48	4.1	PQL	ug/Kg	J (all detects)
SL-276-SA5B-SB-4.0-5.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.46 1.7 0.44	4.3 4.3 4.3	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-277-SA5B-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.42	3.9	PQL	ug/Kg	J (all detects)
SL-278-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.63	4.5	PQL	ug/Kg	J (all detects)
SL-279-SA5B-SB-2.5-3.5	METHYLENE CHLORIDE TOLUENE	J J	0.52 0.08	4.0 4.0	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-189-SA5B-SB-3.0-4.0	Dimethylphthalate	J	35	180	PQL	ug/Kg	J (all detects)
SL-190-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-188-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE NAPHTHALENE	J J	9.6 0.81	20 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-189-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE NAPHTHALENE	J J J	7.7 0.47 0.74	20 1.8 1.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-190-SA5B-SB-4.0-5.0	CHRYSENE	J	0.65	1.9	PQL	ug/Kg	J (all detects)
SL-191-SA5B-SB-4.0-5.0	ANTHRACENE BENZO(A)ANTHRACENE BIS(2-ETHYLHEXYL)PHTHALATE CHRYSENE FLUORANTHENE NAPHTHALENE PHENANTHRENE	J J J J J J J	0.42 0.74 9.4 0.91 0.76 0.79 0.87	1.8 1.8 20 1.8 1.8 1.8 1.8	PQL PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-276-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.6	20	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE072 **Laboratory: LL**

EDD Filename: DE072_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-278-SA5B-SB-2.0-3.0	2-METHYLNAPHTHALENE	J	0.94	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.8	20	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	0.79	1.8	PQL	ug/Kg	

LDC #: 25750W4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/14
SDG #: DE072 ADR
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MSD (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn > 4x)
VII.	Duplicate Sample Analysis	N	DUP (Sb, Cd, Se <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-187-SA5B-SB-4.0-5.0	11	(Al) MS	21		31	
2	SL-188-SA5B-SB-4.0-5.0	12	MSD	22		32	
3	SL-189-SA5B-SB-3.0-4.0	13	DUP	23		33	
4	SL-190-SA5B-SB-4.0-5.0	14		24		34	
5	SL-191-SA5B-SB-4.0-5.0	15		25		35	
6	SL-276-SA5B-SB-4.0-5.0	16		26		36	
7	SL-277-SA5B-SB-2.5-3.5	17		27		37	
8	SL-278-SA5B-SB-2.0-3.0	18		28		38	
9	SL-279-SA5B-SB-2.5-3.5	19		29		39	
10		20		30		40	

Notes:

LDC #: 25750W 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 100x x MS: 2xdil
Associated Samples: ~~2-1277~~ 11

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								
Zr			5.5	2.75	1.7	2.1	1.7	2.4	1.6	1.6	2.2	2.3	1.6								

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.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE072
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6196803BKG Serial Dilution Lab Sample ID: 6196803L
Batch ID(s): P03308B, P03326B, P04726B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		128647.0900		125651.4000		2		P
Antimony	121	0.3726	B	1.5000	U	100		MS
Arsenic	75	34.1700		33.1900		3		MS
Barium	137	544.9000		587.5000		8		MS
Beryllium	9	3.0410		3.1545		4		MS
Boron		8.9000	U	44.5000	U			P
Cadmium	111	0.2000	U	1.0000	U			MS
Calcium		21980.8900		23736.5500		8		P
Chromium	52	76.9700		85.1000		11	E	MS
Cobalt	59	25.0000		29.0000		16	E	MS
Copper	63	31.9800		36.4200		14		MS
Iron		214705.1300		216341.9500		1		P
Lead	208	20.5000		20.6100		1		MS
Lithium		243.3200		265.4500		9		P
Magnesium		50984.2200		54379.5000		7		P
Manganese		2060.0900		2214.5500		7		P
Molybdenum	98	1.7180		1.8255	B	6		MS
Nickel	60	51.2200		59.7500		17	E	MS
Phosphorus		2805.8700		2848.6500		2		P
Potassium		20555.3500		21744.5000		6		P
Selenium	78	0.5336	B	1.0000	U	100		MS
Silver	107	0.0600	U	0.3000	U			MS
Sodium		11476.3600		12382.3000		8		P
Strontium		285.2900		297.5000		4		P
Thallium	203	1.0540		1.1225	B	6		MS
Tin		23.0800	B	50.0000	U	100		P
Titanium		13618.7300		14893.8000		9		P
Vanadium	51	174.0000		198.7500		14	E	MS
Zinc	66	235.0000		232.4500		1		MS
Zirconium		16.1700	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE073

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
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3050B	6010B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3050B	6020	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3060A	7199	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3546	1625C	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3550B	8015B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3550B	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3550B	8082	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3550B	8270C	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	3550B	8270C SIM	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	5035	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	5035	8260B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	5035	8260B SIM	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	8330	8330A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	Gen Prep	9045M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	300.0	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	314.0	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	7471A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	8015B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	8315A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0	6197571	N	METHOD	9012B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3050B	6010B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3050B	6020	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3060A	7199	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3546	1625C	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	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
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3550B	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3550B	8082	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3550B	8270C	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	3550B	8270C SIM	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	5035	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	5035	8260B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	5035	8260B SIM	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	8330	8330A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	300.0	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	314.0	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	7471A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	8015B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	8315A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MS	6197572	MS	METHOD	9012B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3050B	6010B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3050B	6020	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3546	1625C	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3550B	8015B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3550B	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3550B	8082	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3550B	8270C	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	3550B	8270C SIM	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	5035	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	5035	8260B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	8330	8330A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	METHOD	7471A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	METHOD	8015B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	METHOD	8015M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0MSD	6197573	MSD	METHOD	8315A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	3050B	6010B	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	3050B	6020	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	3060A	7199	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	Gen Prep	9045M	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	METHOD	300.0	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	METHOD	314.0	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	METHOD	7471A	III
31-Jan-2011	SL-182-SA5B-SB-4.0-5.0DUP	6197574	DUP	METHOD	9012B	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3050B	6010B	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3050B	6020	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3060A	7199	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3546	1625C	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3550B	8015B	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3550B	8015M	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3550B	8082	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3550B	8270C	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	3550B	8270C SIM	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	5035	8015M	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	5035	8260B	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	5035	8260B SIM	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	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
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	Gen Prep	9045M	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	300.0	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	314.0	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	7471A	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	8015B	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	8015M	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	8315A	III
31-Jan-2011	DUP21-SA5B-QC-013111	6197570	FD	METHOD	9012B	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3050B	6010B	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3050B	6020	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3060A	7199	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3546	1625C	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3550B	8015B	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3550B	8015M	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3550B	8082	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3550B	8270C	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	3550B	8270C SIM	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	5035	8015M	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	5035	8260B	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	5035	8260B SIM	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	8330	8330A	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	Gen Prep	9045M	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	METHOD	300.0	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	METHOD	314.0	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	METHOD	7471A	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	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
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	METHOD	8015M	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	METHOD	8315A	III
31-Jan-2011	SL-204-SA5B-SB-4.0-5.0	6197575	N	METHOD	9012B	III
31-Jan-2011	TB-013111	6197576	TB	5030B	8015M	III
31-Jan-2011	TB-013111	6197576	TB	5030B	8260B	III
31-Jan-2011	TB-013111	6197576	TB	5030B	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: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		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-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B Matrix: SO

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	261		0.0872	MDL	0.559	PQL	mg/Kg	J	E, FD, A
TIN	3.10	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.70	J	0.939	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	1010		0.0890	MDL	0.571	PQL	mg/Kg	J	E, FD, A
TIN	2.99	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.26	J	0.959	MDL	5.71	PQL	mg/Kg	U	B

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	187		0.0898	MDL	0.575	PQL	mg/Kg	J	E, A
SODIUM	100	J	42.9	MDL	115	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.05	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.69	J	0.967	MDL	5.75	PQL	mg/Kg	J	Z

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

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0675	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.144	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q
CHROMIUM	26.2		0.134	MDL	0.447	PQL	mg/Kg	J	A
COBALT	6.70		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	9.37		0.0738	MDL	0.447	PQL	mg/Kg	J	A
LEAD	9.30		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	14.1		0.112	MDL	0.447	PQL	mg/Kg	J	A
SILVER	0.0406	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	47.1		0.0246	MDL	0.112	PQL	mg/Kg	J	A

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0848	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.156	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0999	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	26.1		0.133	MDL	0.443	PQL	mg/Kg	J	A
COBALT	7.72		0.0222	MDL	0.111	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	9.77		0.0731	MDL	0.443	PQL	mg/Kg	J	A
LEAD	8.56		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	18.9		0.111	MDL	0.443	PQL	mg/Kg	J	A
SILVER	0.0374	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	48.4		0.0244	MDL	0.111	PQL	mg/Kg	J	A

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0615	J	0.0460	MDL	0.460	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.111	J	0.0690	MDL	0.230	PQL	mg/Kg	J	Z, Q
CHROMIUM	22.0		0.138	MDL	0.460	PQL	mg/Kg	J	A
COBALT	5.03		0.0230	MDL	0.115	PQL	mg/Kg	J	A
COPPER	8.69		0.0759	MDL	0.460	PQL	mg/Kg	J	A
LEAD	5.78		0.0120	MDL	0.230	PQL	mg/Kg	J	Q, E
NICKEL	12.5		0.115	MDL	0.460	PQL	mg/Kg	J	A
SILVER	0.0360	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	39.6		0.0253	MDL	0.115	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *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-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

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

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

Sample ID: TB-013111 *Collected:* 1/31/2011 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
GASOLINE RANGE ORGANICS (C5-C12)	20	U	20	MDL	50	PQL	ug/L	UJ	S

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

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *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)	1.1	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z, FD
EFH (C30-C40)	4.8		0.46	MDL	1.4	PQL	mg/Kg	J	FD

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	8.0	U	8.0	MDL	14	PQL	mg/Kg	UJ	Q

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *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)	0.46	U	0.46	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C30-C40)	0.46	U	0.46	MDL	1.4	PQL	mg/Kg	UJ	FD

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* REA2 *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	3.7	J	2.3	MDL	6.9	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,4-DICHLOROBENZENE	19	U	19	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Method Category: SVOA

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

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	2.1		0.76	MDL	1.9	PQL	ug/Kg	J	FD
ANTHRACENE	3.7		0.38	MDL	1.9	PQL	ug/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *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	12		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(A)PYRENE	13		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(B)FLUORANTHENE	18		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	4.9		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BENZO(K)FLUORANTHENE	8.0		0.76	MDL	1.9	PQL	ug/Kg	J	FD
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.8	MDL	21	PQL	ug/Kg	J	Z, FD
CHRYSENE	14		0.38	MDL	1.9	PQL	ug/Kg	J	FD
DIBENZO(A,H)ANTHRACENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	28		0.76	MDL	1.9	PQL	ug/Kg	J	FD
FLUORENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	4.1		0.76	MDL	1.9	PQL	ug/Kg	J	FD
PHENANTHRENE	16		0.76	MDL	1.9	PQL	ug/Kg	J	FD
PYRENE	24		0.76	MDL	1.9	PQL	ug/Kg	J	FD

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
ANTHRACENE	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
BIS(2-ETHYLHEXYL)PHTHALATE	7.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z, FD
CHRYSENE	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD
DIBENZO(A,H)ANTHRACENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
FLUORANTHENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
FLUORENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD
PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *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-DINITROBENZENE	46	U	46	MDL	140	PQL	ug/Kg	UJ	FD

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *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-DINITROBENZENE	1100		46	MDL	140	PQL	ug/Kg	J	FD

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP21-SA5B-QC-013111 *Collected:* 1/31/2011 9:49:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.2	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.2	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.31	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z, FD
m,p-Xylene	1.2	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	0.52	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-182-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	4.0	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.0	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.06	U	0.06	MDL	4.0	PQL	ug/Kg	UJ	FD
m,p-Xylene	0.17	U	0.17	MDL	4.0	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	0.50	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.2	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.2	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.38	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	1.3	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 **Laboratory:** LL

EDD Filename: DE073_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-204-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:23:00 *Analysis Type:* RES *Dilution:* 0.9

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.44	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE073

Method Blank Outlier Report

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03408BB221113	2/4/2011 11:13:00 AM	PHOSPHORUS TIN	0.580 mg/Kg 1.42 mg/Kg	DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-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
DUP21-SA5B-QC-013111(RES)	TIN	3.10 mg/Kg	3.10U mg/Kg
SL-182-SA5B-SB-4.0-5.0(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-204-SA5B-SB-4.0-5.0(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB63B212141A	2/3/2011 9:41:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.12 ug/Kg 0.82 ug/Kg 0.13 ug/Kg	DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-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
DUP21-SA5B-QC-013111(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	4.2U ug/Kg
SL-182-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	4.0U ug/Kg
SL-204-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.44 ug/Kg	4.2U ug/Kg

Method: 8330A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P37374AB241913A	2/11/2011 7:13:00 PM	1,3-DINITROBENZENE	77 ug/Kg	DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_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-182-SA5B-SB-4.0-5.0MS SL-182-SA5B-SB-4.0-5.0MSD (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	ANTIMONY LEAD	55 -	49 37	75.00-125.00 75.00-125.00	- 25 (20.00)	ANTIMONY LEAD	J (all detects) UJ (all non-detects)
SL-182-SA5B-SB-4.0-5.0MSD (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	BARIUM	-	56	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-182-SA5B-SB-4.0-5.0MS SL-182-SA5B-SB-4.0-5.0MSD (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	ALUMINUM TITANIUM	1526 209	1286 192	75.00-125.00 75.00-125.00	- -	ALUMINUM TITANIUM	No Qual, >4x
SL-182-SA5B-SB-4.0-5.0MS SL-182-SA5B-SB-4.0-5.0MSD (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	IRON MAGNESIUM MANGANESE	-1958 -6 -632	-2562 -12 -633	75.00-125.00 75.00-125.00 75.00-125.00	- - -	IRON MAGNESIUM MANGANESE	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-182-SA5B-SB-4.0-5.0MSD (SL-182-SA5B-SB-4.0-5.0)	4-CHLOROANILINE	-	-	23.00-95.00	35 (30.00)	4-CHLOROANILINE	J(all detects)
SL-182-SA5B-SB-4.0-5.0MS SL-182-SA5B-SB-4.0-5.0MSD (SL-182-SA5B-SB-4.0-5.0)	1,4-DICHLOROBENZENE BENZIDINE	66 32	65 33	70.00-100.00 35.00-141.00	- -	1,4-DICHLOROBENZENE BENZIDINE	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-182-SA5B-SB-4.0-5.0MS (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	FLUORIDE	58	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_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-182-SA5B-SB-4.0-5.0MS SL-182-SA5B-SB-4.0-5.0MSD (SL-182-SA5B-SB-4.0-5.0)	EFH (C30-C40)	159	-	49.00-123.00	31 (20.00)	EFH (C30-C40)	J(all detects)
SL-182-SA5B-SB-4.0-5.0MS SL-182-SA5B-SB-4.0-5.0MSD (SL-182-SA5B-SB-4.0-5.0)	DIETHYLENE GLYCOL	49	-	59.00-109.00	25 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-182-SA5B-SB-4.0-5.0DUP (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	MANGANESE	58	20.00	J (all detects) UJ (all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-182-SA5B-SB-4.0-5.0DUP (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	ANTIMONY	26	20.00	
	CADMIUM	37	20.00	No Qual
	SELENIUM	36	20.00	OK by difference
	SILVER	26	20.00	

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-182-SA5B-SB-4.0-5.0DUP (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	HEXAVALENT CHROMIUM	200	20.00	No Qual OK by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-182-SA5B-SB-4.0-5.0DUP (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	MERCURY	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_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
P10355AQ241727A P10355AY241708A (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	Aroclor 5442	64	67	75.00-125.00	-	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB63Q212204A (DUP21-SA5B-QC-013111 SL-182-SA5B-SB-4.0-5.0 SL-204-SA5B-SB-4.0-5.0)	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	66 79	- -	68.00-120.00 80.00-120.00	- -	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8015M**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
TB-013111	TRIFLUOROTOLUENE (FID)	66	77.00-119.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
DUP21-SA5B-QC-013111	DECACHLOROBIPHENYL	185	45.00-120.00	All Target Analytes	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-182-SA5B-SB-4.0-5.0	DUP21-SA5B-QC-013111			
MOISTURE	12.4	12.3	1		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-182-SA5B-SB-4.0-5.0	DUP21-SA5B-QC-013111			
FLUORIDE	2.4	2.2	9	50.00	No Qualifiers Applied
Nitrate-NO3	1.6	1.7	6	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-182-SA5B-SB-4.0-5.0	DUP21-SA5B-QC-013111			
ALUMINUM	24200	24700	2	50.00	No Qualifiers Applied
CALCIUM	3220	3120	3	50.00	
IRON	29600	26800	10	50.00	
LITHIUM	30.1	27.1	10	50.00	
MAGNESIUM	5550	4870	13	50.00	
PHOSPHORUS	144	102	34	50.00	
POTASSIUM	1820	1580	14	50.00	
SODIUM	177	167	6	50.00	
STRONTIUM	30.3	27.7	9	50.00	
TIN	2.99	3.10	4	50.00	
TITANIUM	1320	1240	6	50.00	
Zirconium	4.26	3.70	14	50.00	
MANGANESE	1010	261	118	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-182-SA5B-SB-4.0-5.0	DUP21-SA5B-QC-013111			
ANTIMONY	0.156	0.144	8	50.00	No Qualifiers Applied
ARSENIC	8.11	7.44	9	50.00	
BARIUM	132	122	8	50.00	
BERYLLIUM	0.967	0.927	4	50.00	
CADMIUM	0.0999	0.114	13	50.00	
CHROMIUM	26.1	26.2	0	50.00	
COBALT	7.72	6.70	14	50.00	
COPPER	9.77	9.37	4	50.00	
LEAD	8.56	9.30	8	50.00	
MOLYBDENUM	0.353	0.312	12	50.00	
NICKEL	18.9	14.1	29	50.00	
SELENIUM	0.0848	0.0675	23	50.00	
SILVER	0.0374	0.0406	8	50.00	
THALLIUM	0.263	0.246	7	50.00	
VANADIUM	48.4	47.1	3	50.00	
ZINC	55.6	51.1	8	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-182-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP21-SA5B-QC-013111	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.36	0.40	11	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-182-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP21-SA5B-QC-013111	Sample RPD	eQAPP RPD	Flag
EFH (C21-C30)	1.4 U	1.1	200	50.00	J(all detects)
EFH (C30-C40)	1.4 U	4.8	200	50.00	UJ(all non-detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-182-SA5B-SB-4.0-5.0	Concentration (ug/Kg) DUP21-SA5B-QC-013111	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	0.50	0.52	4	50.00	No Qualifiers Applied
ETHYLBENZENE	4.0 U	0.31	200	50.00	J(all detects)
m,p-Xylene	4.0 U	1.2	200	50.00	UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-182-SA5B-SB-4.0-5.0	Concentration (ug/Kg) DUP21-SA5B-QC-013111	Sample RPD	eQAPP RPD	Flag
ACENAPHTHENE	1.9 U	2.1	200	50.00	
ANTHRACENE	1.9 U	3.7	200	50.00	
BENZO(A)ANTHRACENE	1.9 U	12	200	50.00	
BENZO(A)PYRENE	1.9 U	13	200	50.00	
BENZO(B)FLUORANTHENE	1.9 U	18	200	50.00	
BENZO(G,H,I)PERYLENE	1.9 U	4.9	200	50.00	
BENZO(K)FLUORANTHENE	1.9 U	8.0	200	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	7.1	15	71	50.00	J(all detects)
CHRYSENE	1.9 U	14	200	50.00	UJ(all non-detects)
DIBENZO(A,H)ANTHRACENE	1.9 U	1.6	200	50.00	
FLUORANTHENE	1.9 U	28	200	50.00	
FLUORENE	1.9 U	1.5	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.9 U	4.1	200	50.00	
PHENANTHRENE	1.9 U	16	200	50.00	
PYRENE	1.9 U	24	200	50.00	

Method: 8330A
Matrix: SO

Analyte	Concentration (ug/Kg) SL-182-SA5B-SB-4.0-5.0	Concentration (ug/Kg) DUP21-SA5B-QC-013111	Sample RPD	eQAPP RPD	Flag
1,3-DINITROBENZENE	1100	140 U	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-182-SA5B-SB-4.0-5.0	DUP21-SA5B-QC-013111			
PH	7.07	6.63	6	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-182-SA5B-SB-4.0-5.0	DUP21-SA5B-QC-013111			
Oxidation Reduction Potential	462	455	2		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE073 Laboratory: LL

EDD Filename: DE073_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-182-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP21-SA5B-QC-013111	TIN	J	3.10	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.70	5.59	PQL	mg/Kg	
SL-182-SA5B-SB-4.0-5.0	TIN	J	2.99	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.26	5.71	PQL	mg/Kg	
SL-204-SA5B-SB-4.0-5.0	SODIUM	J	100	115	PQL	mg/Kg	J (all detects)
	TIN	J	3.05	11.5	PQL	mg/Kg	
	Zirconium	J	3.69	5.75	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP21-SA5B-QC-013111	ANTIMONY	J	0.144	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0675	0.447	PQL	mg/Kg	
	SILVER	J	0.0406	0.112	PQL	mg/Kg	
SL-182-SA5B-SB-4.0-5.0	ANTIMONY	J	0.156	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0999	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0848	0.443	PQL	mg/Kg	
	SILVER	J	0.0374	0.111	PQL	mg/Kg	
SL-204-SA5B-SB-4.0-5.0	ANTIMONY	J	0.111	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0615	0.460	PQL	mg/Kg	
	SILVER	J	0.0360	0.115	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP21-SA5B-QC-013111	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-182-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE073 **Laboratory: LL**

EDD Filename: DE073_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP21-SA5B-QC-013111	EFH (C21-C30)	J	1.1	1.4	PQL	mg/Kg	J (all detects)
SL-204-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	3.7	6.9	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP21-SA5B-QC-013111	ETHYLBENZENE	J	0.31	4.2	PQL	ug/Kg	
	m,p-Xylene	J	1.2	4.2	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.52	4.2	PQL	ug/Kg	
SL-182-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.50	4.0	PQL	ug/Kg	J (all detects)
SL-204-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.38	4.2	PQL	ug/Kg	
	m,p-Xylene	J	1.3	4.2	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.44	4.2	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP21-SA5B-QC-013111	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	21	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	1.9	PQL	ug/Kg	J (all detects)
	FLUORENE	J	1.5	1.9	PQL	ug/Kg	
SL-182-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.1	21	PQL	ug/Kg	J (all detects)

LDC #: 25750X4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/11

SDG #: DE073 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn > 4X)
VII.	Duplicate Sample Analysis	N	D (Sb, Cd, Hg, Ag, Se < 5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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	DUP21-SA5B-QC-013111	11		21		31	
2	SL-182-SA5B-SB-4.0-5.0	12		22		32	
3	SL-204-SA5B-SB-4.0-5.0	13		23		33	
4	SL-182-SA5B-SB-4.0-5.0MS	14		24		34	
5	SL-182-SA5B-SB-4.0-5.0MSD	15		25		35	
6	SL-182-SA5B-SB-4.0-5.0DUP	16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 25750X 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: C

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 1, 3

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Quals															
Zr			6.7	3.35																

Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: 2

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	2															
Zr			8.7	4.35	4.3															

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.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE073
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6197571BKG Serial Dilution Lab Sample ID: 6197571L
Batch ID(s): P03408B, P03426A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		212249.4300		203969.5000		4		P
Antimony	121	0.7039	B	1.5000	U	100		MS
Arsenic	75	36.5900		38.0300		4		MS
Barium	137	597.4000		608.5000		2		MS
Beryllium	9	4.3620		4.7865		10		MS
Boron		8.9000	U	44.5000	U			P
Cadmium	111	0.4509	B	1.3850	B	207		MS
Calcium		28185.0800		30316.7000		8		P
Chromium	52	117.9000		130.6500		11	E	MS
Cobalt	59	34.8300		38.8750		12	E	MS
Copper	63	44.0800		50.1500		14	E	MS
Iron		258918.1000		247706.3500		4		P
Lead	208	38.6400		38.0350		2		MS
Lithium		264.0900		276.3000		5		P
Magnesium		48627.5400		49501.4500		2		P
Manganese		8822.7700		9798.3000		11	E	P
Molybdenum	98	1.5940		1.4770	B	7		MS
Nickel	60	85.4100		97.1000		14	E	MS
Phosphorus		1257.7800		1207.5500		4		P
Potassium		15942.3700		16257.4000		2		P
Selenium	78	0.3826	B	1.0000	U	100		MS
Silver	107	0.1686	B	0.3000	U	100		MS
Sodium		1553.2700		1865.0000	U	100		P
Strontium		265.3400		264.9500		0		P
Thallium	203	1.1880		1.0840	B	9		MS
Tin		26.1800	B	50.0000	U	100		P
Titanium		11566.6800		12386.9500		7		P
Vanadium	51	218.4000		242.6000		11	E	MS
Zinc	66	250.8000		258.7000		3		MS
Zirconium		37.3400	B	72.5000	B	94		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

DE073 2717

SAMPLE DELIVERY GROUP

DE074

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
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	3050B	6010B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	3050B	6020	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	3060A	7199	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	3550B	8082	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	3550B	8270C	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	3550B	8270C SIM	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	5035	8260B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	5035	8260B SIM	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	Gen Prep	9045M	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	METHOD	300.0	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	METHOD	314.0	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0	6197581	N	METHOD	7471A	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	3050B	6010B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	3050B	6020	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	3060A	7199	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	3550B	8082	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	3550B	8270C	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	3550B	8270C SIM	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	5035	8260B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	5035	8260B SIM	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	METHOD	300.0	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	METHOD	314.0	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MS	6197582	MS	METHOD	7471A	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	3050B	6010B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	3050B	6020	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	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
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	3550B	8270C	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	3550B	8270C SIM	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	5035	8260B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	5035	8260B SIM	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0MSD	6197583	MSD	METHOD	7471A	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	3050B	6010B	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	3050B	6020	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	3060A	7199	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	Gen Prep	9045M	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	METHOD	300.0	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	METHOD	314.0	III
31-Jan-2011	SL-195-SA5B-SB-4.0-5.0DUP	6197584	DUP	METHOD	7471A	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	3050B	6010B	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	3050B	6020	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	3060A	7199	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	3550B	8082	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	3550B	8270C	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	3550B	8270C SIM	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	5035	8260B	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	5035	8260B SIM	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	Gen Prep	9045M	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	METHOD	300.0	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	METHOD	314.0	III
31-Jan-2011	DUP22-SA5B-QC-013111	6197577	FD	METHOD	7471A	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	3050B	6010B	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	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
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	3060A	7199	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	3550B	8082	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	3550B	8270C	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	3550B	8270C SIM	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	5035	8260B	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	5035	8260B SIM	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	Gen Prep	9045M	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	METHOD	300.0	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	METHOD	314.0	III
31-Jan-2011	SL-200-SA5B-SB-4.0-5.0	6197588	N	METHOD	7471A	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	3050B	6010B	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	3050B	6020	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	3060A	7199	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	3550B	8082	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	3550B	8270C	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	3550B	8270C SIM	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	5035	8260B	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	5035	8260B SIM	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	Gen Prep	9045M	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	METHOD	300.0	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	METHOD	314.0	III
31-Jan-2011	SL-199-SA5B-SB-4.0-5.0	6197587	N	METHOD	7471A	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	3050B	6010B	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	3050B	6020	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	3060A	7199	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	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
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	3550B	8270C	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	3550B	8270C SIM	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	5035	8260B	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	5035	8260B SIM	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	Gen Prep	9045M	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	METHOD	300.0	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	METHOD	314.0	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	METHOD	6850	III
31-Jan-2011	SL-177-SA5B-SB-4.0-5.0	6197580	N	METHOD	7471A	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	3050B	6010B	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	3050B	6020	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	3060A	7199	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	3550B	8082	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	3550B	8270C	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	3550B	8270C SIM	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	5035	8260B	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	5035	8260B SIM	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	Gen Prep	9045M	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	METHOD	300.0	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	METHOD	314.0	III
31-Jan-2011	SL-197-SA5B-SB-4.0-5.0	6197585	N	METHOD	7471A	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	3050B	6010B	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	3050B	6020	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	3060A	7199	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	3550B	8082	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	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
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	3550B	8270C SIM	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	5035	8260B	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	5035	8260B SIM	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	Gen Prep	9045M	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	METHOD	300.0	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	METHOD	314.0	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	METHOD	6850	III
31-Jan-2011	SL-176-SA5B-SB-4.0-5.0	6197579	N	METHOD	7471A	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	3050B	6010B	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	3050B	6020	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	3060A	7199	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	3550B	8082	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	3550B	8270C	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	3550B	8270C SIM	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	5035	8260B	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	5035	8260B SIM	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	Gen Prep	9045M	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	METHOD	300.0	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	METHOD	314.0	III
31-Jan-2011	SL-198-SA5B-SB-4.0-5.0	6197586	N	METHOD	7471A	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	3050B	6010B	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	3050B	6020	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	3060A	7199	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	3550B	8082	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	3550B	8270C	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	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
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	5035	8260B	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	5035	8260B SIM	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	Gen Prep	9045M	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	METHOD	300.0	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	N	METHOD	314.0	III
31-Jan-2011	SL-175-SA5B-SB-4.0-5.0	6197578	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: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *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		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 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
FLUORIDE	1.7		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-197-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *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-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.4		0.92	MDL	1.2	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.9		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	22000		5.62	MDL	22.3	PQL	mg/Kg	J	A
BORON	0.994	U	0.994	MDL	5.58	PQL	mg/Kg	UJ	FD
CALCIUM	2450		6.84	MDL	22.3	PQL	mg/Kg	J	A
IRON	24500		5.26	MDL	22.3	PQL	mg/Kg	J	A
LITHIUM	23.9		0.25	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4470		2.84	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	337		0.0871	MDL	0.558	PQL	mg/Kg	J	A
PHOSPHORUS	238		0.625	MDL	11.2	PQL	mg/Kg	J	A
POTASSIUM	2470		20.1	MDL	55.8	PQL	mg/Kg	J	Q, A
STRONTIUM	21.5		0.0692	MDL	0.558	PQL	mg/Kg	J	A
TIN	2.93	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1300		0.424	MDL	1.12	PQL	mg/Kg	J	A
Zirconium	2.83	J	0.938	MDL	5.58	PQL	mg/Kg	U	B

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17100		5.70	MDL	22.7	PQL	mg/Kg	J	A
CALCIUM	26100		6.94	MDL	22.7	PQL	mg/Kg	J	A
IRON	23400		5.34	MDL	22.7	PQL	mg/Kg	J	A
LITHIUM	20.4		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	4460		2.88	MDL	11.3	PQL	mg/Kg	J	A
MANGANESE	324		0.0884	MDL	0.566	PQL	mg/Kg	J	A
PHOSPHORUS	344		0.634	MDL	11.3	PQL	mg/Kg	J	A
POTASSIUM	2150		20.4	MDL	56.6	PQL	mg/Kg	J	Q, A
STRONTIUM	48.9		0.0702	MDL	0.566	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory:** LL

EDD Filename: DE074_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-175-SA5B-SB-4.0-5.0 ***Collected:*** 1/31/2011 4:06:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.66	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1160		0.430	MDL	1.13	PQL	mg/Kg	J	A
Zirconium	3.93	J	0.952	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5B-SB-4.0-5.0 ***Collected:*** 1/31/2011 3:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	27500		5.65	MDL	22.4	PQL	mg/Kg	J	A
CALCIUM	4560		6.88	MDL	22.4	PQL	mg/Kg	J	A
IRON	28100		5.29	MDL	22.4	PQL	mg/Kg	J	A
LITHIUM	36.8		0.25	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4950		2.85	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	252		0.0875	MDL	0.561	PQL	mg/Kg	J	A
PHOSPHORUS	123		0.629	MDL	11.2	PQL	mg/Kg	J	A
POTASSIUM	1610		20.2	MDL	56.1	PQL	mg/Kg	J	Q, A
STRONTIUM	27.2		0.0696	MDL	0.561	PQL	mg/Kg	J	A
TIN	3.32	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1260		0.427	MDL	1.12	PQL	mg/Kg	J	A
Zirconium	3.25	J	0.943	MDL	5.61	PQL	mg/Kg	U	B

Sample ID: SL-177-SA5B-SB-4.0-5.0 ***Collected:*** 1/31/2011 2:04:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	26200		5.82	MDL	23.1	PQL	mg/Kg	J	A
BORON	1.60	J	1.03	MDL	5.78	PQL	mg/Kg	J	Z
CALCIUM	7280		7.09	MDL	23.1	PQL	mg/Kg	J	A
IRON	29300		5.45	MDL	23.1	PQL	mg/Kg	J	A
LITHIUM	42.0		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	5570		2.94	MDL	11.6	PQL	mg/Kg	J	A
MANGANESE	413		0.0902	MDL	0.578	PQL	mg/Kg	J	A
PHOSPHORUS	186		0.648	MDL	11.6	PQL	mg/Kg	J	A
POTASSIUM	1860		20.8	MDL	57.8	PQL	mg/Kg	J	Q, A
STRONTIUM	36.3		0.0717	MDL	0.578	PQL	mg/Kg	J	A
TIN	3.11	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
TITANIUM	1280		0.440	MDL	1.16	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory:** LL

EDD Filename: DE074_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.21	J	0.972	MDL	5.78	PQL	mg/Kg	U	B

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 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
ALUMINUM	15600		5.68	MDL	22.6	PQL	mg/Kg	J	A
BORON	1.76	J	1.01	MDL	5.65	PQL	mg/Kg	J	Z, FD
CALCIUM	2120		6.92	MDL	22.6	PQL	mg/Kg	J	A
IRON	17900		5.32	MDL	22.6	PQL	mg/Kg	J	A
LITHIUM	16.5		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	3320		2.87	MDL	11.3	PQL	mg/Kg	J	A
MANGANESE	300		0.0881	MDL	0.565	PQL	mg/Kg	J	A
PHOSPHORUS	220		0.633	MDL	11.3	PQL	mg/Kg	J	A
POTASSIUM	2650		20.3	MDL	56.5	PQL	mg/Kg	J	Q, A
SODIUM	86.9	J	42.1	MDL	113	PQL	mg/Kg	J	Z
STRONTIUM	20.7		0.0700	MDL	0.565	PQL	mg/Kg	J	A
TIN	2.88	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1190		0.429	MDL	1.13	PQL	mg/Kg	J	A
Zirconium	2.94	J	0.949	MDL	5.65	PQL	mg/Kg	U	B

Sample ID: SL-197-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18100		5.58	MDL	22.2	PQL	mg/Kg	J	A
CALCIUM	2900		6.80	MDL	22.2	PQL	mg/Kg	J	A
IRON	23600		5.22	MDL	22.2	PQL	mg/Kg	J	A
LITHIUM	24.1		0.24	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4560		2.82	MDL	11.1	PQL	mg/Kg	J	A
MANGANESE	347		0.0865	MDL	0.554	PQL	mg/Kg	J	A
PHOSPHORUS	143		0.621	MDL	11.1	PQL	mg/Kg	J	A
POTASSIUM	1320		20.0	MDL	55.4	PQL	mg/Kg	J	Q, A
STRONTIUM	24.6		0.0687	MDL	0.554	PQL	mg/Kg	J	A
TIN	2.66	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
TITANIUM	1290		0.421	MDL	1.11	PQL	mg/Kg	J	A
Zirconium	2.33	J	0.931	MDL	5.54	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory:** LL

EDD Filename: DE074_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20000		5.61	MDL	22.3	PQL	mg/Kg	J	A
BORON	1.65	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z
CALCIUM	3100		6.84	MDL	22.3	PQL	mg/Kg	J	A
IRON	23200		5.26	MDL	22.3	PQL	mg/Kg	J	A
LITHIUM	32.3		0.25	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4610		2.84	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	179		0.0871	MDL	0.558	PQL	mg/Kg	J	A
PHOSPHORUS	104		0.625	MDL	11.2	PQL	mg/Kg	J	A
POTASSIUM	1390		20.1	MDL	55.8	PQL	mg/Kg	J	Q, A
STRONTIUM	25.9		0.0692	MDL	0.558	PQL	mg/Kg	J	A
TIN	3.01	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1300		0.424	MDL	1.12	PQL	mg/Kg	J	A
Zirconium	2.60	J	0.938	MDL	5.58	PQL	mg/Kg	U	B

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	22300		5.74	MDL	22.8	PQL	mg/Kg	J	A
BORON	2.28	J	1.02	MDL	5.71	PQL	mg/Kg	J	Z
CALCIUM	2710		7.00	MDL	22.8	PQL	mg/Kg	J	A
IRON	24400		5.38	MDL	22.8	PQL	mg/Kg	J	A
LITHIUM	26.8		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	4310		2.90	MDL	11.4	PQL	mg/Kg	J	A
MANGANESE	235		0.0891	MDL	0.571	PQL	mg/Kg	J	A
PHOSPHORUS	157		0.640	MDL	11.4	PQL	mg/Kg	J	A
POTASSIUM	1680		20.6	MDL	57.1	PQL	mg/Kg	J	Q, A
STRONTIUM	25.6		0.0708	MDL	0.571	PQL	mg/Kg	J	A
TIN	3.00	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1380		0.434	MDL	1.14	PQL	mg/Kg	J	A
Zirconium	2.95	J	0.959	MDL	5.71	PQL	mg/Kg	U	B

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19700		5.74	MDL	22.8	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.02	J	1.02	MDL	5.70	PQL	mg/Kg	J	Z
CALCIUM	2280		6.99	MDL	22.8	PQL	mg/Kg	J	A
IRON	21700		5.37	MDL	22.8	PQL	mg/Kg	J	A
LITHIUM	22.0		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	3970		2.90	MDL	11.4	PQL	mg/Kg	J	A
MANGANESE	356		0.0890	MDL	0.570	PQL	mg/Kg	J	A
PHOSPHORUS	229		0.639	MDL	11.4	PQL	mg/Kg	J	A
POTASSIUM	2730		20.5	MDL	57.0	PQL	mg/Kg	J	Q, A
SODIUM	110	J	42.5	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	22.5		0.0707	MDL	0.570	PQL	mg/Kg	J	A
TIN	2.58	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1310		0.433	MDL	1.14	PQL	mg/Kg	J	A
Zirconium	2.98	J	0.958	MDL	5.70	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.155	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0683	MDL	0.228	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0670	J	0.0456	MDL	0.114	PQL	mg/Kg	J	Z, FD
SILVER	0.0406	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, FD
ZINC	48.6		0.638	MDL	3.42	PQL	mg/Kg	J	Q

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0772	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0686	U	0.0686	MDL	0.229	PQL	mg/Kg	UJ	Q
SILVER	0.0480	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	43.3		0.641	MDL	3.43	PQL	mg/Kg	J	Q

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0727	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.108	J	0.0680	MDL	0.227	PQL	mg/Kg	J	Z, Q
SILVER	0.106	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	51.2		0.635	MDL	3.40	PQL	mg/Kg	J	Q

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0608	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ZINC	58.2		0.635	MDL	3.40	PQL	mg/Kg	J	Q

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory:** LL

EDD Filename: DE074_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.158		0.0447	MDL	0.112	PQL	mg/Kg	J	FD
SILVER	0.0203	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, FD
ZINC	44.1		0.626	MDL	3.36	PQL	mg/Kg	J	Q

Sample ID: SL-197-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:51:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0789	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-197-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:51:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0686	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0819	J	0.0443	MDL	0.111	PQL	mg/Kg	J	Z
SILVER	0.0393	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
ZINC	43.6		0.621	MDL	3.33	PQL	mg/Kg	J	Q

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0680	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0840	J	0.0676	MDL	0.225	PQL	mg/Kg	J	Z, Q
SILVER	0.0740	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	45.6		0.631	MDL	3.38	PQL	mg/Kg	J	Q

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0867	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.109	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0599	J	0.0452	MDL	0.113	PQL	mg/Kg	J	Z
SILVER	0.0501	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
ZINC	42.3		0.633	MDL	3.39	PQL	mg/Kg	J	Q

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *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	0.0456	MDL	0.456	PQL	mg/Kg	J	Z

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.108	J	0.0684	MDL	0.228	PQL	mg/Kg	J	Z, Q
SILVER	0.0382	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	49.5		0.639	MDL	3.42	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.30	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1

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

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 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
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0139	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0153	J	0.0033	MDL	0.113	PQL	mg/Kg	J	Z

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0176	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0093	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory:** LL

EDD Filename: DE074_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0097	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0065	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *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	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *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	L
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-197-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:51:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *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	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA **Method:** 8270C **Matrix:** SO

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	R	Q

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

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *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	6.8	U	6.8	MDL	21	PQL	ug/Kg	UJ	FD

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *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	10	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *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	8.1	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.72	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.89	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	7.7	J	6.9	MDL	21	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory:** LL

EDD Filename: DE074_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *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	7.5	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP22-SA5B-QC-013111 *Collected:* 1/31/2011 9:36:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.15	J	0.06	MDL	4.3	PQL	ug/Kg	J	Z, FD
m,p-Xylene	0.68	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	0.60	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-175-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 4:06:00 *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	0.46	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-176-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:04:00 *Analysis Type:* RES *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.23	J	0.07	MDL	4.8	PQL	ug/Kg	J	Z
m,p-Xylene	0.77	J	0.20	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.56	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

Sample ID: SL-177-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:04:00 *Analysis Type:* RES *Dilution:* 0.94

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.29	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	1.1	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.45	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Chlorotrifluoroethylene	0.47	U	0.47	MDL	4.7	PQL	ug/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-195-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 9:30:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.06	U	0.06	MDL	3.7	PQL	ug/Kg	UJ	FD
m,p-Xylene	0.16	U	0.16	MDL	3.7	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	0.38	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-197-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 2:51:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.17	J	0.05	MDL	3.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.60	J	0.15	MDL	3.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.35	J	0.22	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-198-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 3:49:00 *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.10	J	0.06	MDL	3.7	PQL	ug/Kg	J	Z
m,p-Xylene	0.33	J	0.16	MDL	3.7	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.37	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-199-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 12:43:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.25	J	0.06	MDL	3.7	PQL	ug/Kg	J	Z
m,p-Xylene	0.94	J	0.16	MDL	3.7	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.51	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-200-SA5B-SB-4.0-5.0 *Collected:* 1/31/2011 11:04:00 *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.16	J	0.06	MDL	3.8	PQL	ug/Kg	J	Z
m,p-Xylene	0.62	J	0.16	MDL	3.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.43	J	0.23	MDL	3.8	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 | Laboratory: LL

EDD Filename: DE074_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory: LL**

EDD Filename: DE074_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE074 **Laboratory: LL**

EDD Filename: DE074_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE074

Method Blank Outlier Report

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03508BB221911	2/9/2011 7:11:00 PM	TIN	1.48 mg/Kg	DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-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
DUP22-SA5B-QC-013111(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-175-SA5B-SB-4.0-5.0(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-176-SA5B-SB-4.0-5.0(RES)	TIN	3.32 mg/Kg	3.32U mg/Kg
SL-177-SA5B-SB-4.0-5.0(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-195-SA5B-SB-4.0-5.0(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-197-SA5B-SB-4.0-5.0(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-198-SA5B-SB-4.0-5.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-199-SA5B-SB-4.0-5.0(RES)	TIN	3.00 mg/Kg	3.00U mg/Kg
SL-200-SA5B-SB-4.0-5.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB64B211500A	2/4/2011 3:00:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	7.5 ug/Kg 0.79 ug/Kg 0.53 ug/Kg	DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-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
DUP22-SA5B-QC-013111(RES)	METHYLENE CHLORIDE	0.60 ug/Kg	4.3U ug/Kg
SL-175-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.46 ug/Kg	4.3U ug/Kg
SL-176-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.8U ug/Kg
SL-177-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	4.4U ug/Kg
SL-195-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.38 ug/Kg	3.7U ug/Kg
SL-197-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.35 ug/Kg	3.6U ug/Kg
SL-198-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.37 ug/Kg	3.7U ug/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE074 **Laboratory: LL**

EDD Filename: DE074_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-199-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.51 ug/Kg	3.7U ug/Kg
SL-200-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	3.8U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_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-195-SA5B-SB-4.0-5.0MS SL-195-SA5B-SB-4.0-5.0MSD (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	ANTIMONY ZINC	48 72	46 -	75.00-125.00 75.00-125.00	- -	ANTIMONY ZINC	J (all detects) UJ (all non-detects)
SL-195-SA5B-SB-4.0-5.0MS SL-195-SA5B-SB-4.0-5.0MSD (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	BARIUM	138	159	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-195-SA5B-SB-4.0-5.0MS SL-195-SA5B-SB-4.0-5.0MSD (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	2451 189 2864 323 160 136 341	2710 186 2285 330 - 132 311	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	- - - - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Ca, Fe, Mg, Mn, Ti No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-195-SA5B-SB-4.0-5.0MS SL-195-SA5B-SB-4.0-5.0MSD (SL-195-SA5B-SB-4.0-5.0)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_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-195-SA5B-SB-4.0-5.0MS (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	FLUORIDE	44	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-195-SA5B-SB-4.0-5.0MS SL-195-SA5B-SB-4.0-5.0MSD (SL-195-SA5B-SB-4.0-5.0)	AROCLOR 1260	247	267	39.00-149.00	-	AROCLOR 1242, 1248, 1254, 1260	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-195-SA5B-SB-4.0-5.0MS (SL-195-SA5B-SB-4.0-5.0)	Chlorotrifluoroethylene	67	-	70.00-130.00	-	Chlorotrifluoroethylene	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE074 **Laboratory: LL**

EDD Filename: DE074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-195-SA5B-SB-4.0-5.0DUP (DUP22-SA5B-QC-013111 SL -175-SA5B-SB-4.0-5.0 SL -176-SA5B-SB-4.0-5.0 SL -177-SA5B-SB-4.0-5.0 SL -195-SA5B-SB-4.0-5.0 SL -197-SA5B-SB-4.0-5.0 SL -198-SA5B-SB-4.0-5.0 SL -199-SA5B-SB-4.0-5.0 SL -200-SA5B-SB-4.0-5.0)	FLUORIDE	48	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-195-SA5B-SB-4.0-5.0DUP (DUP22-SA5B-QC-013111 SL -175-SA5B-SB-4.0-5.0 SL -176-SA5B-SB-4.0-5.0 SL -177-SA5B-SB-4.0-5.0 SL -195-SA5B-SB-4.0-5.0 SL -197-SA5B-SB-4.0-5.0 SL -198-SA5B-SB-4.0-5.0 SL -199-SA5B-SB-4.0-5.0 SL -200-SA5B-SB-4.0-5.0)	CADMIUM	26	20.00	No Qual OK by difference
	SELENIUM	23	20.00	
	SILVER	35	20.00	

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-195-SA5B-SB-4.0-5.0DUP (DUP22-SA5B-QC-013111 SL -175-SA5B-SB-4.0-5.0 SL -176-SA5B-SB-4.0-5.0 SL -177-SA5B-SB-4.0-5.0 SL -195-SA5B-SB-4.0-5.0 SL -197-SA5B-SB-4.0-5.0 SL -198-SA5B-SB-4.0-5.0 SL -199-SA5B-SB-4.0-5.0 SL -200-SA5B-SB-4.0-5.0)	MERCURY	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_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
P7LALCSQ261139 (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	Butylbenzylphthalate	117	-	75.00-115.00	-	Butylbenzylphthalate	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10357AQ242235A (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	AROCLOR 1260	268	-	65.00-137.00	-	AROCLOR 1242, 1248, 1254, 1260	J(all detects)
P10357AQ240548A P10357AY240530A (DUP22-SA5B-QC-013111 SL-175-SA5B-SB-4.0-5.0 SL-176-SA5B-SB-4.0-5.0 SL-177-SA5B-SB-4.0-5.0 SL-195-SA5B-SB-4.0-5.0 SL-197-SA5B-SB-4.0-5.0 SL-198-SA5B-SB-4.0-5.0 SL-199-SA5B-SB-4.0-5.0 SL-200-SA5B-SB-4.0-5.0)	Aroclor 5442	63	57	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE074 **Laboratory: LL**

EDD Filename: DE074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
MOISTURE	13.2	12.2	8		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
FLUORIDE	1.7	1.7	0	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
ALUMINUM	15600	22000	34	50.00	
CALCIUM	2120	2450	14	50.00	
IRON	17900	24500	31	50.00	
LITHIUM	16.5	23.9	37	50.00	
MAGNESIUM	3320	4470	30	50.00	
MANGANESE	300	337	12	50.00	
PHOSPHORUS	220	238	8	50.00	No Qualifiers Applied
POTASSIUM	2650	2470	7	50.00	
SODIUM	86.9	117	30	50.00	
STRONTIUM	20.7	21.5	4	50.00	
TIN	2.88	2.93	2	50.00	
TITANIUM	1190	1300	9	50.00	
Zirconium	2.94	2.83	4	50.00	
BORON	1.76	5.58 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
ANTIMONY	0.113	0.136	18	50.00	
ARSENIC	4.48	6.04	30	50.00	
BARIUM	89.7	94.7	5	50.00	
BERYLLIUM	0.569	0.697	20	50.00	
CHROMIUM	17.9	21.1	16	50.00	
COBALT	5.35	5.99	11	50.00	
COPPER	8.48	7.89	7	50.00	
LEAD	5.02	6.10	19	50.00	No Qualifiers Applied
MOLYBDENUM	0.622	0.665	7	50.00	
NICKEL	11.1	12.0	8	50.00	
SELENIUM	0.130	0.155	18	50.00	
THALLIUM	0.257	0.299	15	50.00	
VANADIUM	32.2	39.3	20	50.00	
ZINC	44.1	48.6	10	50.00	
CADMIUM	0.158	0.0670	81	50.00	J(all detects)
SILVER	0.0203	0.0406	67	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE074 Laboratory: LL

EDD Filename: DE074_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
HEXAVALENT CHROMIUM	0.50	0.42	17	50.00	No Qualifiers Applied

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
METHYLENE CHLORIDE	0.38	0.60	45	50.00	No Qualifiers Applied
ETHYLBENZENE	3.7 U	0.15	200	50.00	J(all detects)
m,p-Xylene	3.7 U	0.68	200	50.00	UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
BIS(2-ETHYLHEXYL)PHTHALATE	7.7	21 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
PH	7.10	6.60	7	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-195-SA5B-SB-4.0-5.0	DUP22-SA5B-QC-013111			
Oxidation Reduction Potential	386	492	24		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE074 | Laboratory: LL

EDD Filename: DE074_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP22-SA5B-QC-013111	TIN	J	2.93	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.83	5.58	PQL	mg/Kg	
SL-175-SA5B-SB-4.0-5.0	TIN	J	2.66	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.93	5.66	PQL	mg/Kg	
SL-176-SA5B-SB-4.0-5.0	TIN	J	3.32	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.25	5.61	PQL	mg/Kg	
SL-177-SA5B-SB-4.0-5.0	BORON	J	1.60	5.78	PQL	mg/Kg	J (all detects)
	TIN	J	3.11	11.6	PQL	mg/Kg	
	Zirconium	J	3.21	5.78	PQL	mg/Kg	
SL-195-SA5B-SB-4.0-5.0	BORON	J	1.76	5.65	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.9	113	PQL	mg/Kg	
	TIN	J	2.88	11.3	PQL	mg/Kg	
	Zirconium	J	2.94	5.65	PQL	mg/Kg	
SL-197-SA5B-SB-4.0-5.0	TIN	J	2.66	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.33	5.54	PQL	mg/Kg	
SL-198-SA5B-SB-4.0-5.0	BORON	J	1.65	5.58	PQL	mg/Kg	J (all detects)
	TIN	J	3.01	11.2	PQL	mg/Kg	
	Zirconium	J	2.60	5.58	PQL	mg/Kg	
SL-199-SA5B-SB-4.0-5.0	BORON	J	2.28	5.71	PQL	mg/Kg	J (all detects)
	TIN	J	3.00	11.4	PQL	mg/Kg	
	Zirconium	J	2.95	5.71	PQL	mg/Kg	
SL-200-SA5B-SB-4.0-5.0	BORON	J	2.02	5.70	PQL	mg/Kg	J (all detects)
	SODIUM	J	110	114	PQL	mg/Kg	
	TIN	J	2.58	11.4	PQL	mg/Kg	
	Zirconium	J	2.98	5.70	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP22-SA5B-QC-013111	ANTIMONY	J	0.136	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0670	0.114	PQL	mg/Kg	
	SELENIUM	J	0.155	0.456	PQL	mg/Kg	
	SILVER	J	0.0406	0.114	PQL	mg/Kg	
SL-175-SA5B-SB-4.0-5.0	SELENIUM	J	0.0772	0.458	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0480	0.114	PQL	mg/Kg	
SL-176-SA5B-SB-4.0-5.0	ANTIMONY	J	0.108	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0727	0.453	PQL	mg/Kg	
	SILVER	J	0.106	0.113	PQL	mg/Kg	
SL-177-SA5B-SB-4.0-5.0	ANTIMONY	J	0.139	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0608	0.454	PQL	mg/Kg	
SL-195-SA5B-SB-4.0-5.0	ANTIMONY	J	0.113	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.130	0.447	PQL	mg/Kg	
	SILVER	J	0.0203	0.112	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE074 | Laboratory: LL

EDD Filename: DE074_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-197-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0686	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0819	0.111	PQL	mg/Kg	
	SELENIUM	J	0.0789	0.443	PQL	mg/Kg	
	SILVER	J	0.0393	0.111	PQL	mg/Kg	
SL-198-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0840	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0680	0.451	PQL	mg/Kg	
	SILVER	J	0.0740	0.113	PQL	mg/Kg	
SL-199-SA5B-SB-4.0-5.0	ANTIMONY	J	0.109	0.226	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0599	0.113	PQL	mg/Kg	
	SELENIUM	J	0.0867	0.452	PQL	mg/Kg	
	SILVER	J	0.0501	0.113	PQL	mg/Kg	
SL-200-SA5B-SB-4.0-5.0	ANTIMONY	J	0.108	0.228	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.113	0.456	PQL	mg/Kg	
	SILVER	J	0.0382	0.114	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP22-SA5B-QC-013111	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-175-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-176-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.23	1.2	PQL	mg/Kg	J (all detects)
SL-195-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-199-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.2	PQL	mg/Kg	J (all detects)
SL-200-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-175-SA5B-SB-4.0-5.0	MERCURY	J	0.0139	0.111	PQL	mg/Kg	J (all detects)
SL-176-SA5B-SB-4.0-5.0	MERCURY	J	0.0153	0.113	PQL	mg/Kg	J (all detects)
SL-177-SA5B-SB-4.0-5.0	MERCURY	J	0.0176	0.116	PQL	mg/Kg	J (all detects)
SL-198-SA5B-SB-4.0-5.0	MERCURY	J	0.0093	0.107	PQL	mg/Kg	J (all detects)
SL-199-SA5B-SB-4.0-5.0	MERCURY	J	0.0097	0.114	PQL	mg/Kg	J (all detects)
SL-200-SA5B-SB-4.0-5.0	MERCURY	J	0.0065	0.111	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE074 **Laboratory: LL**

EDD Filename: DE074_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP22-SA5B-QC-013111	ETHYLBENZENE	J	0.15	4.3	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.68	4.3	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.60	4.3	PQL	ug/Kg	
SL-175-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.46	4.3	PQL	ug/Kg	J (all detects)
SL-176-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.23	4.8	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.77	4.8	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.56	4.8	PQL	ug/Kg	
SL-177-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.29	4.4	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	1.1	4.4	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.45	4.4	PQL	ug/Kg	
SL-195-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.38	3.7	PQL	ug/Kg	J (all detects)
SL-197-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.17	3.6	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.60	3.6	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.35	3.6	PQL	ug/Kg	
SL-198-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.10	3.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.33	3.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.37	3.7	PQL	ug/Kg	
SL-199-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.25	3.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.94	3.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.51	3.7	PQL	ug/Kg	
SL-200-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.16	3.8	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.62	3.8	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.43	3.8	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-175-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	J (all detects)
SL-176-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.1	21	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.72	1.9	PQL	ug/Kg	
	PYRENE	J	0.89	1.9	PQL	ug/Kg	
SL-195-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.7	21	PQL	ug/Kg	J (all detects)
SL-198-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.5	20	PQL	ug/Kg	J (all detects)

LDC #: 25750Y4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/1/4

SDG #: DE074 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MSD (Al, Ba, Ca, Fe, Mg, Mn, Ti >4X)
VII.	Duplicate Sample Analysis	N	DUP (Cd, Hg, Se, Ag <5xRL)
VIII.	Laboratory Control Samples (LCS)	~~N~~ A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	/	

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	DUP22-SA5B-QC-013111 ?	11	SL-195-SA5B-SB-4.0-5.0MSD	21		31	
2	SL-175-SA5B-SB-4.0-5.0	12	SL-195-SA5B-SB-4.0-5.0DUP	22		32	
3	SL-176-SA5B-SB-4.0-5.0	13		23		33	
4	SL-177-SA5B-SB-4.0-5.0	14		24		34	
5	SL-195-SA5B-SB-4.0-5.0 ?	15		25		35	
6	SL-197-SA5B-SB-4.0-5.0	16		26		36	
7	SL-198-SA5B-SB-4.0-5.0	17		27		37	
8	SL-199-SA5B-SB-4.0-5.0	18		28		38	
9	SL-200-SA5B-SB-4.0-5.0	19		29		39	
10	SL-195-SA5B-SB-4.0-5.0MS	20		30		40	

Notes:

LDC #: 25750Y 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
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	3	4	5	6	7	8	9									
Zr			7.1	3.55	2.8	3.2	3.2	2.9	2.3	2.6	2.9 ~~8.0~~	3.0									

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.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE074
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6197581BKG Serial Dilution Lab Sample ID: 6197581L
Batch ID(s): P03508B, P03526A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		137890.4600		164197.2500		19	E	P
Antimony	121	0.5055	B	1.5000	U	100		MS
Arsenic	75	20.0400		19.9800		0		MS
Barium	137	401.0000		426.6500		6		MS
Beryllium	9	2.5420		2.4310	B	4		MS
Boron		15.5700	B	44.5000	U	100		P
Cadmium	111	0.7063		1.4235	B	102		MS
Calcium		18758.1000		24011.2000		28	E	P
Chromium	52	79.8700		84.8500		6		MS
Cobalt	59	23.9200		26.1250		9		MS
Copper	63	37.9100		40.9550		8		MS
Iron		158142.1400		193060.9500		22	E	P
Lead	208	22.4300		22.6950		1		MS
Lithium		145.8300		187.1500		28	E	P
Magnesium		29382.6700		36587.5500		25	E	P
Manganese		2654.1300		3403.8000		28	E	P
Molybdenum	98	2.7820		3.0535		10		MS
Nickel	60	49.6500		53.1500		7		MS
Phosphorus		1949.2900		2321.6000		19	E	P
Potassium		23420.0900		28886.9000		23	E	P
Selenium	78	0.5815	B	1.0000	U	100		MS
Silver	107	0.0908	B	0.3000	U	100		MS
Sodium		769.2100	B	1865.0000	U	100		P
Strontium		183.4100		227.3000		24	E	P
Thallium	203	1.1470		1.1195	B	2		MS
Tin		25.5400	B	50.0000	U	100		P
Titanium		10521.7200		13721.0500		30	E	P
Vanadium	51	143.8000		154.2000		7		MS
Zinc	66	197.1000		200.2500		2		MS
Zirconium		26.0100	B	63.1500	B	143		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS: DE074 1945
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE075

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
02-Feb-2011	TB-020311	6198519	TB	5030B	8015M	III
02-Feb-2011	TB-020311	6198519	TB	5030B	8260B	III
02-Feb-2011	TB-020311	6198519	TB	5030B	8260B SIM	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	3050B	6010B	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	3050B	6020	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	3060A	7199	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	3550B	8082	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	3550B	8270C	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	3550B	8270C SIM	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	5035	8260B	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	5035	8260B SIM	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	Gen Prep	9045M	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	METHOD	300.0	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	METHOD	314.0	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5	6198513	N	METHOD	7471A	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5MSD	P198513M242157A	MSD	3550B	8082	III
03-Feb-2011	SL-207-SA5B-SB-2.5-3.5MS	P198513R242139A	MS	3550B	8082	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	3050B	6010B	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	3050B	6020	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	3060A	7199	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	3550B	8082	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	3550B	8270C	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	3550B	8270C SIM	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	5035	8260B	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	5035	8260B SIM	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	Gen Prep	9045M	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
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	METHOD	300.0	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	METHOD	314.0	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	METHOD	6850	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5	6198512	N	METHOD	7471A	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5DUP	P198512D272050A	DUP	METHOD	314.0	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5DUP	P198512D291315A	DUP	Gen Prep	9045M	III
03-Feb-2011	SL-205-SA5B-SB-2.5-3.5MS	P198512R272115A	MS	METHOD	314.0	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	3050B	6010B	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	3050B	6020	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	3060A	7199	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	3550B	8082	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	3550B	8270C	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	3550B	8270C SIM	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	5035	8260B	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	5035	8260B SIM	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	Gen Prep	9045M	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	METHOD	300.0	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	METHOD	314.0	III
03-Feb-2011	SL-210-SA5B-SB-4.0-5.0	6198514	N	METHOD	7471A	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	3005A	6010B	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	3020A	6020	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	3510C	8082	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	3510C	8270C	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	3510C	8270C SIM	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	5030B	8260B	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	5030B	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
03-Feb-2011	EB28-SA5B-020311	6198510	EB	Gen Prep	300.0	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	Gen Prep	314.0	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	Gen Prep	7199	III
03-Feb-2011	EB28-SA5B-020311	6198510	EB	METHOD	7470A	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3050B	6010B	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3050B	6020	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3060A	7199	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3546	1625C	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3550B	8015B	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3550B	8015M	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3550B	8082	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3550B	8270C	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	3550B	8270C SIM	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	5035	8015M	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	5035	8260B	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	5035	8260B SIM	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	8330	8330A	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	Gen Prep	9045M	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	300.0	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	314.0	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	7471A	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	8015B	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	8015M	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	8315A	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0	6198516	N	METHOD	9012B	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0MSD	P198516M320626A	MSD	3550B	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
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0MSD	P198516M321353A	MSD	3550B	8015B	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0MS	P198516R320601A	MS	3550B	8015M	III
03-Feb-2011	SL-229-SA5B-SB-2.0-3.0MS	P198516R321308A	MS	3550B	8015B	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	3050B	6010B	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	3050B	6020	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	3060A	7199	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	3550B	8082	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	3550B	8270C	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	3550B	8270C SIM	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	5035	8260B	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	5035	8260B SIM	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	Gen Prep	9045M	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	METHOD	300.0	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	METHOD	314.0	III
03-Feb-2011	SL-211-SA5B-SB-4.0-5.0	6198515	N	METHOD	7471A	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	3005A	6010B	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	3020A	6020	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	3510C	8082	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	3510C	8270C	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	3510C	8270C SIM	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	5030B	8260B	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	5030B	8260B SIM	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	Gen Prep	300.0	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	Gen Prep	314.0	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	Gen Prep	7199	III
03-Feb-2011	EB29-SA5B-020311	6198511	EB	METHOD	7470A	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
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	3050B	6010B	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	3050B	6020	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	3060A	7199	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	3550B	8082	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	3550B	8270C	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	3550B	8270C SIM	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	5035	8260B	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	5035	8260B SIM	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	Gen Prep	9045M	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	METHOD	300.0	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	METHOD	314.0	III
03-Feb-2011	SL-274-SA5B-SB-4.0-5.0	6198518	N	METHOD	7471A	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3050B	6010B	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3050B	6020	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3060A	7199	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3546	1625C	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3550B	8015B	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3550B	8015M	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3550B	8082	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3550B	8270C	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	3550B	8270C SIM	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	5035	8015M	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	5035	8260B	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	5035	8260B SIM	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	8330	8330A	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	Gen Prep	9045M	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
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	METHOD	300.0	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	METHOD	314.0	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	METHOD	7471A	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	METHOD	8015B	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	METHOD	8015M	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	N	METHOD	8315A	III
03-Feb-2011	SL-230-SA5B-SB-2.0-3.0	6198517	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: DE075 Laboratory: LL

EDD Filename: PrepDE075_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 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	1.4	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-205-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:47:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19600		5.63	MDL	22.4	PQL	mg/Kg	J	A
CALCIUM	2620		6.87	MDL	22.4	PQL	mg/Kg	J	A
IRON	22200		5.28	MDL	22.4	PQL	mg/Kg	J	A
LITHIUM	30.6		0.25	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4330		2.84	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	228		0.0874	MDL	0.560	PQL	mg/Kg	J	A
PHOSPHORUS	205		0.627	MDL	11.2	PQL	mg/Kg	J	A
POTASSIUM	1610		20.2	MDL	56.0	PQL	mg/Kg	J	Q, A
STRONTIUM	21.4		0.0694	MDL	0.560	PQL	mg/Kg	J	A
TIN	3.03	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1210		0.426	MDL	1.12	PQL	mg/Kg	J	A
Zirconium	2.48	J	0.941	MDL	5.60	PQL	mg/Kg	U	B

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17500		5.69	MDL	22.6	PQL	mg/Kg	J	A
CALCIUM	2490		6.93	MDL	22.6	PQL	mg/Kg	J	A
IRON	23800		5.32	MDL	22.6	PQL	mg/Kg	J	A
LITHIUM	20.8		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	5130		2.87	MDL	11.3	PQL	mg/Kg	J	A
MANGANESE	196		0.0882	MDL	0.565	PQL	mg/Kg	J	A
PHOSPHORUS	182		0.633	MDL	11.3	PQL	mg/Kg	J	A
POTASSIUM	1480		20.3	MDL	56.5	PQL	mg/Kg	J	Q, A
STRONTIUM	18.7		0.0701	MDL	0.565	PQL	mg/Kg	J	A
TIN	3.01	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: PrepDE075_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1260		0.429	MDL	1.13	PQL	mg/Kg	J	A
Zirconium	2.02	J	0.949	MDL	5.65	PQL	mg/Kg	U	B

Sample ID: SL-210-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 10:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14100		5.36	MDL	21.3	PQL	mg/Kg	J	A
CALCIUM	3330		6.53	MDL	21.3	PQL	mg/Kg	J	A
IRON	24300		5.02	MDL	21.3	PQL	mg/Kg	J	A
LITHIUM	28.2		0.23	MDL	2.1	PQL	mg/Kg	J	A
MAGNESIUM	5800		2.71	MDL	10.7	PQL	mg/Kg	J	A
MANGANESE	295		0.0831	MDL	0.533	PQL	mg/Kg	J	A
PHOSPHORUS	419		0.597	MDL	10.7	PQL	mg/Kg	J	A
POTASSIUM	1910		19.2	MDL	53.3	PQL	mg/Kg	J	Q, A
SODIUM	100	J	39.7	MDL	107	PQL	mg/Kg	J	Z
STRONTIUM	18.6		0.0661	MDL	0.533	PQL	mg/Kg	J	A
TIN	2.94	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1380		0.405	MDL	1.07	PQL	mg/Kg	J	A
Zirconium	2.19	J	0.895	MDL	5.33	PQL	mg/Kg	U	B

Sample ID: SL-211-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 1:48:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	15400		5.69	MDL	22.6	PQL	mg/Kg	J	A
BORON	1.60	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
CALCIUM	2370		6.93	MDL	22.6	PQL	mg/Kg	J	A
IRON	19800		5.33	MDL	22.6	PQL	mg/Kg	J	A
LITHIUM	18.6		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	3820		2.87	MDL	11.3	PQL	mg/Kg	J	A
MANGANESE	311		0.0882	MDL	0.566	PQL	mg/Kg	J	A
PHOSPHORUS	379		0.633	MDL	11.3	PQL	mg/Kg	J	A
POTASSIUM	3520		20.4	MDL	56.6	PQL	mg/Kg	J	Q, A
SODIUM	73.6	J	42.2	MDL	113	PQL	mg/Kg	J	Z
STRONTIUM	22.0		0.0701	MDL	0.566	PQL	mg/Kg	J	A
TIN	2.58	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: PrepDE075_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-211-SA5B-SB-4.0-5.0 **Collected:** 2/3/2011 1:48:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1170		0.430	MDL	1.13	PQL	mg/Kg	J	A
Zirconium	2.28	J	0.950	MDL	5.66	PQL	mg/Kg	U	B

Sample ID: SL-229-SA5B-SB-2.0-3.0 **Collected:** 2/3/2011 1:08:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	14800		5.44	MDL	21.6	PQL	mg/Kg	J	A
CALCIUM	1910		6.63	MDL	21.6	PQL	mg/Kg	J	A
IRON	21100		5.09	MDL	21.6	PQL	mg/Kg	J	A
LITHIUM	19.6		0.24	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4170		2.75	MDL	10.8	PQL	mg/Kg	J	A
MANGANESE	226		0.0843	MDL	0.540	PQL	mg/Kg	J	A
PHOSPHORUS	223		0.605	MDL	10.8	PQL	mg/Kg	J	A
POTASSIUM	2690		19.5	MDL	54.0	PQL	mg/Kg	J	Q, A
STRONTIUM	15.9		0.0670	MDL	0.540	PQL	mg/Kg	J	A
TIN	3.09	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
TITANIUM	1120		0.411	MDL	1.08	PQL	mg/Kg	J	A
Zirconium	0.996	J	0.908	MDL	5.40	PQL	mg/Kg	U	B

Sample ID: SL-230-SA5B-SB-2.0-3.0 **Collected:** 2/3/2011 3:19:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	13200		5.70	MDL	22.7	PQL	mg/Kg	J	A
CALCIUM	1850		6.95	MDL	22.7	PQL	mg/Kg	J	A
IRON	17900		5.34	MDL	22.7	PQL	mg/Kg	J	A
LITHIUM	38.9		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	3000		2.88	MDL	11.3	PQL	mg/Kg	J	A
MANGANESE	182		0.0885	MDL	0.567	PQL	mg/Kg	J	A
PHOSPHORUS	434		0.635	MDL	11.3	PQL	mg/Kg	J	A
POTASSIUM	1990		20.4	MDL	56.7	PQL	mg/Kg	J	Q, A
STRONTIUM	12.8		0.0703	MDL	0.567	PQL	mg/Kg	J	A
TIN	3.34	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
TITANIUM	1130		0.431	MDL	1.13	PQL	mg/Kg	J	A
Zirconium	1.38	J	0.953	MDL	5.67	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: PrepDE075_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	17100		5.64	MDL	22.4	PQL	mg/Kg	J	A
BORON	1.70	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
CALCIUM	3700		6.87	MDL	22.4	PQL	mg/Kg	J	A
IRON	23200		5.28	MDL	22.4	PQL	mg/Kg	J	A
LITHIUM	28.7		0.25	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	4810		2.85	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	324		0.0874	MDL	0.561	PQL	mg/Kg	J	A
PHOSPHORUS	354		0.628	MDL	11.2	PQL	mg/Kg	J	A
POTASSIUM	3160		20.2	MDL	56.1	PQL	mg/Kg	J	Q, A
SODIUM	97.8	J	41.8	MDL	112	PQL	mg/Kg	J	Z
STRONTIUM	28.2		0.0695	MDL	0.561	PQL	mg/Kg	J	A
TIN	2.90	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
TITANIUM	1280		0.426	MDL	1.12	PQL	mg/Kg	J	A
Zirconium	2.50	J	0.942	MDL	5.61	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-205-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:47:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0560	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z

Sample ID: SL-205-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:47:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0672	U	0.0672	MDL	0.224	PQL	mg/Kg	UJ	Q
CADMIUM	0.0908	J	0.0448	MDL	0.112	PQL	mg/Kg	J	Z
SILVER	0.0557	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
ZINC	47.7		0.627	MDL	3.36	PQL	mg/Kg	J	Q

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0457	MDL	0.457	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: PrepDE075_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.148	J	0.0685	MDL	0.228	PQL	mg/Kg	J	Z, Q
CADMIUM	0.105	J	0.0457	MDL	0.114	PQL	mg/Kg	J	Z
ZINC	48.3		0.639	MDL	3.42	PQL	mg/Kg	J	Q

Sample ID: SL-210-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 10:34:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-210-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 10:34:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.107	J	0.0627	MDL	0.209	PQL	mg/Kg	J	Z, Q
ZINC	54.9		0.585	MDL	3.14	PQL	mg/Kg	J	Q

Sample ID: SL-211-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 1:48:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 1:48:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	U	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q
SILVER	0.0630	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	50.5		0.615	MDL	3.29	PQL	mg/Kg	J	Q

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0771	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0655	U	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: PrepDE075_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	50.0		0.611	MDL	3.27	PQL	mg/Kg	J	Q

Sample ID: SL-230-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 3:19:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0689	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-230-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 3:19:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0674	U	0.0674	MDL	0.225	PQL	mg/Kg	UJ	Q
CADMIUM	0.0654	J	0.0449	MDL	0.112	PQL	mg/Kg	J	Z
ZINC	60.8		0.629	MDL	3.37	PQL	mg/Kg	J	Q

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 PM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0659	U	0.0659	MDL	0.220	PQL	mg/Kg	UJ	Q
ZINC	49.5		0.615	MDL	3.30	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix: AQ**

Sample ID: EB28-SA5B-020311 *Collected:* 2/3/2011 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
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	R	H

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: PrepDE075_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS **Method:** 7199 **Matrix:** AQ

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 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	5.0	U	5.0	MDL	10.0	PQL	ug/L	R	H

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

Sample ID: SL-205-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:47:00 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	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 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	0.76	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-210-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 10:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.27	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 1:48:00 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	0.44	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-230-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 3:19:00 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	0.38	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 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	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: PrepDE075_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-205-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:47:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0078	J	0.0032	MDL	0.112	PQL	mg/Kg	J	Z

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0093	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-210-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 10:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0109	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-211-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 1:48:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-230-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 3:19:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0059	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0095	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: AQ**

Sample ID: TB-020311 *Collected:* 2/2/2011 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
GASOLINE RANGE ORGANICS (C5-C12)	20	U	20	MDL	50	PQL	ug/L	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: PrepDE075_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 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)	0.44	U	0.44	MDL	1.3	PQL	mg/Kg	UJ	Q

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: EB28-SA5B-020311 *Collected:* 2/3/2011 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	0.096	U	0.096	MDL	0.48	PQL	ug/L	UJ	L, E
Aroclor 5442	0.096	U	0.096	MDL	0.48	PQL	ug/L	UJ	L, E
Aroclor 5460	0.096	U	0.096	MDL	0.48	PQL	ug/L	UJ	L, E

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	0.098	U	0.098	MDL	0.49	PQL	ug/L	UJ	L, E
Aroclor 5442	0.098	U	0.098	MDL	0.49	PQL	ug/L	UJ	L, E
Aroclor 5460	0.098	U	0.098	MDL	0.49	PQL	ug/L	UJ	L, E

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB28-SA5B-020311 *Collected:* 2/3/2011 11:30:00 *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-DINITROPHENOL	10	U	10	MDL	29	PQL	ug/L	UJ	L
4,6-DINITRO-2-METHYLPHENOL	5	U	5	MDL	14	PQL	ug/L	UJ	L
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	E
BENZOIC ACID	6	U	6	MDL	14	PQL	ug/L	UJ	E

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 PM *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-DINITROPHENOL	10	U	10	MDL	29	PQL	ug/L	UJ	L
4,6-DINITRO-2-METHYLPHENOL	5	U	5	MDL	14	PQL	ug/L	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: PrepDE075_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 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
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	E
BENZOIC ACID	6	U	6	MDL	14	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 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	26	J	18	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB28-SA5B-020311 *Collected:* 2/3/2011 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
BIS(2-ETHYLHEXYL)PHTHALATE	0.071	J	0.048	MDL	0.96	PQL	ug/L	U	B
Butylbenzylphthalate	0.048	U	0.048	MDL	0.96	PQL	ug/L	UJ	L
Diethylphthalate	0.16	J	0.048	MDL	0.96	PQL	ug/L	J	Z
Dimethylphthalate	0.048	U	0.048	MDL	0.96	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.39	J	0.048	MDL	0.96	PQL	ug/L	J	Z
NAPHTHALENE	0.014	J	0.0096	MDL	0.048	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.0096	U	0.0096	MDL	0.048	PQL	ug/L	UJ	L

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 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
BIS(2-ETHYLHEXYL)PHTHALATE	0.086	J	0.048	MDL	0.97	PQL	ug/L	U	B
Butylbenzylphthalate	0.048	U	0.048	MDL	0.97	PQL	ug/L	UJ	L
Diethylphthalate	0.16	J	0.048	MDL	0.97	PQL	ug/L	J	Z
Dimethylphthalate	0.048	U	0.048	MDL	0.97	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.51	J	0.048	MDL	0.97	PQL	ug/L	J	Z
NAPHTHALENE	0.024	J	0.0097	MDL	0.048	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: PrepDE075_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8270C SIM **Matrix:** AQ

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 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	0.0097	U	0.0097	MDL	0.048	PQL	ug/L	UJ	L

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

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 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	17	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8330A **Matrix:** SO

Sample ID: SL-230-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 3:19:00 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-DINITROBENZENE	140	J	46	MDL	140	PQL	ug/Kg	U	B

Method Category: VOA **Method:** 8260B **Matrix:** AQ

Sample ID: EB28-SA5B-020311 *Collected:* 2/3/2011 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
ACETONE	9	J	6	MDL	20	PQL	ug/L	J	Z
METHYLENE CHLORIDE	2	J	2	MDL	5	PQL	ug/L	J	Z

Sample ID: EB29-SA5B-020311 *Collected:* 2/3/2011 2:15:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	4	J	2	MDL	5	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: PrepDE075_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-205-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:47:00 AM *Analysis Type:* RES *Dilution:* 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.3	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.56	J	0.26	MDL	4.3	PQL	ug/Kg	U	B, F
TOLUENE	0.11	J	0.09	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-207-SA5B-SB-2.5-3.5 *Collected:* 2/3/2011 9:32:00 AM *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.2	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.29	J	0.06	MDL	4.2	PQL	ug/Kg	U	B
m,p-Xylene	1.0	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.43	J	0.25	MDL	4.2	PQL	ug/Kg	U	B, F
TOLUENE	0.1	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-210-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 10:34:00 *Analysis Type:* RES *Dilution:* 0.97

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.50	J	0.25	MDL	4.2	PQL	ug/Kg	U	B, F
TOLUENE	0.09	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-211-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 1:48:00 PM *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.14	U	0.14	MDL	3.6	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.33	J	0.22	MDL	3.6	PQL	ug/Kg	U	B, F

Sample ID: SL-229-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 1:08:00 PM *Analysis Type:* RES *Dilution:* 1.06

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.19	U	0.19	MDL	4.7	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.21	J	0.07	MDL	4.7	PQL	ug/Kg	U	B
m,p-Xylene	0.81	J	0.20	MDL	4.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.57	J	0.28	MDL	4.7	PQL	ug/Kg	U	B, F
TOLUENE	0.10	J	0.09	MDL	4.7	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: PrepDE075_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-230-SA5B-SB-2.0-3.0 *Collected:* 2/3/2011 3:19:00 PM *Analysis Type:* RES *Dilution:* 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.0	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.17	J	0.06	MDL	4.0	PQL	ug/Kg	U	B
m,p-Xylene	0.56	J	0.17	MDL	4.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.53	J	0.24	MDL	4.0	PQL	ug/Kg	U	B, F

Sample ID: SL-274-SA5B-SB-4.0-5.0 *Collected:* 2/3/2011 2:37:00 PM *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.7	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.11	J	0.06	MDL	3.7	PQL	ug/Kg	U	B
m,p-Xylene	0.33	J	0.16	MDL	3.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.45	J	0.22	MDL	3.7	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: PrepDE075_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: PrepDE075_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: PrepDE075_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE075

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: DE075_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199 **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB28-SA5B-020311 (RES)	Sampling To Analysis	119.00	24.00	HOURS	J (all detects)
EB29-SA5B-020311 (RES)		116.00	24.00	HOURS	R (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: DE075_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03508BB221911	2/9/2011 7:11:00 PM	TIN	1.48 mg/Kg	SL-205-SA5B-SB-2.5-3.5 SL-207-SA5B-SB-2.5-3.5 SL-210-SA5B-SB-4.0-5.0 SL-211-SA5B-SB-4.0-5.0 SL-229-SA5B-SB-2.0-3.0 SL-230-SA5B-SB-2.0-3.0 SL-274-SA5B-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-205-SA5B-SB-2.5-3.5(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-207-SA5B-SB-2.5-3.5(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-210-SA5B-SB-4.0-5.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-211-SA5B-SB-4.0-5.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-229-SA5B-SB-2.0-3.0(RES)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-230-SA5B-SB-2.0-3.0(RES)	TIN	3.34 mg/Kg	3.34U mg/Kg
SL-274-SA5B-SB-4.0-5.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB65B211254A	2/7/2011 12:54:00 PM	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE TOLUENE	0.08 ug/Kg 0.20 ug/Kg 0.40 ug/Kg 0.31 ug/Kg	SL-205-SA5B-SB-2.5-3.5 SL-207-SA5B-SB-2.5-3.5 SL-210-SA5B-SB-4.0-5.0 SL-211-SA5B-SB-4.0-5.0 SL-229-SA5B-SB-2.0-3.0 SL-230-SA5B-SB-2.0-3.0 SL-274-SA5B-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-205-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.3U ug/Kg
SL-205-SA5B-SB-2.5-3.5(RES)	TOLUENE	0.11 ug/Kg	4.3U ug/Kg
SL-207-SA5B-SB-2.5-3.5(RES)	ETHYLBENZENE	0.29 ug/Kg	4.2U ug/Kg
SL-207-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.2U ug/Kg
SL-207-SA5B-SB-2.5-3.5(RES)	TOLUENE	0.1 ug/Kg	4.2U ug/Kg
SL-210-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	4.2U ug/Kg
SL-210-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	4.2U ug/Kg
SL-211-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.33 ug/Kg	3.6U ug/Kg
SL-229-SA5B-SB-2.0-3.0(RES)	ETHYLBENZENE	0.21 ug/Kg	4.7U ug/Kg
SL-229-SA5B-SB-2.0-3.0(RES)	m,p-Xylene	0.81 ug/Kg	4.7U ug/Kg
SL-229-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.7U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE075 **Laboratory:** LL

EDD Filename: DE075_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-229-SA5B-SB-2.0-3.0(RES)	TOLUENE	0.10 ug/Kg	4.7U ug/Kg
SL-230-SA5B-SB-2.0-3.0(RES)	ETHYLBENZENE	0.17 ug/Kg	4.0U ug/Kg
SL-230-SA5B-SB-2.0-3.0(RES)	m,p-Xylene	0.56 ug/Kg	4.0U ug/Kg
SL-230-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.53 ug/Kg	4.0U ug/Kg
SL-274-SA5B-SB-4.0-5.0(RES)	ETHYLBENZENE	0.11 ug/Kg	3.7U ug/Kg
SL-274-SA5B-SB-4.0-5.0(RES)	m,p-Xylene	0.33 ug/Kg	3.7U ug/Kg
SL-274-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.7U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWC03B260808	2/10/2011 8:08:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	0.072 ug/L	EB28-SA5B-020311 EB29-SA5B-020311

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
EB28-SA5B-020311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.071 ug/L	0.96U ug/L
EB29-SA5B-020311(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.086 ug/L	0.97U ug/L

Method: 8330A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P37374AB241913A	2/11/2011 7:13:00 PM	1,3-DINITROBENZENE	77 ug/Kg	SL-229-SA5B-SB-2.0-3.0 SL-230-SA5B-SB-2.0-3.0

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-230-SA5B-SB-2.0-3.0(RES)	1,3-DINITROBENZENE	140 ug/Kg	140U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: DE075_v1 **eQAPP Name: CDM_SSFL_110509**

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB28-SA5B-020311(RES)	2/3/2011 11:30:00 AM	ACETONE METHYLENE CHLORIDE	9 ug/L 2 ug/L	SL-205-SA5B-SB-2.5-3.5 SL-207-SA5B-SB-2.5-3.5 SL-210-SA5B-SB-4.0-5.0 SL-211-SA5B-SB-4.0-5.0 SL-229-SA5B-SB-2.0-3.0 SL-230-SA5B-SB-2.0-3.0 SL-274-SA5B-SB-4.0-5.0
EB29-SA5B-020311(RES)	2/3/2011 2:15:00 PM	METHYLENE CHLORIDE	4 ug/L	SL-205-SA5B-SB-2.5-3.5 SL-207-SA5B-SB-2.5-3.5 SL-210-SA5B-SB-4.0-5.0 SL-211-SA5B-SB-4.0-5.0 SL-229-SA5B-SB-2.0-3.0 SL-230-SA5B-SB-2.0-3.0 SL-274-SA5B-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-205-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	4.3U ug/Kg
SL-207-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.43 ug/Kg	4.2U ug/Kg
SL-210-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.50 ug/Kg	4.2U ug/Kg
SL-211-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.33 ug/Kg	3.6U ug/Kg
SL-229-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.57 ug/Kg	4.7U ug/Kg
SL-230-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.53 ug/Kg	4.0U ug/Kg
SL-274-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	3.7U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE075 | Laboratory: LL

EDD Filename: DE075_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-229-SA5B-SB-2.0-3.0MS SL-229-SA5B-SB-2.0-3.0MSD (SL-229-SA5B-SB-2.0-3.0)	EFH (C8-C11)	13	18	49.00-123.00	31 (20.00)	EFH (C8-C11)	J (all detects) UJ (all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: DE075_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WCLCSQ260840	Butylbenzylphthalate	-	66	70.00-130.00	-	Butylbenzylphthalate	
P7WCLCSY260911	Dimethylphthalate	65	52	70.00-130.00	-	Dimethylphthalate	J (all detects)
(EB28 -SA5B -020311	N-NITROSODIMETHYLAMINE	59	59	70.00-130.00	-	N-NITROSODIMETHYLAMINE	UJ (all non-detects)
EB29-SA5B -020311)							

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WDLCSQ260925	2,4-DINITROPHENOL	63	60	64.00-120.00	-	2,4-DINITROPHENOL	
P7WDLCSY260950	4,6-DINITRO-2-METHYLPHENOL	-	76	78.00-119.00	-	4,6-DINITRO-2-METHYLPHEN	J(all detects)
(EB28 -SA5B -020311	4-CHLOROANILINE	-	-	42.00-124.00	36 (30.00)	4-CHLOROANILINE	UJ(all non-detects)
EB29-SA5B -020311)	BENZOIC ACID	-	-	10.00-69.00	45 (30.00)	BENZOIC ACID	

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10371AQ241742A	Aroclor 5442	72	44	75.00-125.00	48 (30.00)	Aroclor 5432, 5442, 5460	
P10371AY240427A							J(all detects)
(EB28 -SA5B -020311							UJ(all non-detects)
EB29-SA5B -020311)							

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB65Q211337A	CIS-1,3-DICHLOROPROPENE	79	-	80.00-120.00	-	CIS-1,3-DICHLOROPROPENE	
(SL-205-SA5B -SB-2.5-3.5							
SL -207-SA5B -SB-2.5-3.5							
SL -210-SA5B -SB-4.0-5.0							J(all detects)
SL -211-SA5B -SB-4.0-5.0							UJ(all non-detects)
SL -229-SA5B -SB-2.0-3.0							
SL -230-SA5B -SB-2.0-3.0							
SL -274-SA5B -SB-4.0-5.0)							

Surrogate Outlier Report

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: DE075_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015M
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
TB-020311	TRIFLUOROTOLUENE (FID)	67	77.00-119.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
EB28-SA5B-020311	PHENOL-D6	23	25.00-120.00	No Affected Compounds	No Qual One Out

Reporting Limit Outliers

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: DE075_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB28-SA5B-020311	ACETONE	J	9	20	PQL	ug/L	J (all detects)
	METHYLENE CHLORIDE	J	2	5	PQL	ug/L	
EB29-SA5B-020311	METHYLENE CHLORIDE	J	4	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB28-SA5B-020311	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.071	0.96	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.16	0.96	PQL	ug/L	
	Di-n-butylphthalate	J	0.39	0.96	PQL	ug/L	
	NAPHTHALENE	J	0.014	0.048	PQL	ug/L	
EB29-SA5B-020311	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.086	0.97	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.16	0.97	PQL	ug/L	
	Di-n-butylphthalate	J	0.51	0.97	PQL	ug/L	
	NAPHTHALENE	J	0.024	0.048	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-229-SA5B-SB-2.0-3.0	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
SL-205-SA5B-SB-2.5-3.5	TIN	J	3.03	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.60	PQL	mg/Kg	
SL-207-SA5B-SB-2.5-3.5	TIN	J	3.01	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.02	5.65	PQL	mg/Kg	
SL-210-SA5B-SB-4.0-5.0	SODIUM	J	100	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	10.7	PQL	mg/Kg	
	Zirconium	J	2.19	5.33	PQL	mg/Kg	
SL-211-SA5B-SB-4.0-5.0	BORON	J	1.60	5.66	PQL	mg/Kg	J (all detects)
	SODIUM	J	73.6	113	PQL	mg/Kg	
	TIN	J	2.58	11.3	PQL	mg/Kg	
	Zirconium	J	2.28	5.66	PQL	mg/Kg	
SL-229-SA5B-SB-2.0-3.0	TIN	J	3.09	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.996	5.40	PQL	mg/Kg	
SL-230-SA5B-SB-2.0-3.0	TIN	J	3.34	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.38	5.67	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: DE075_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-274-SA5B-SB-4.0-5.0	BORON	J	1.70	5.61	PQL	mg/Kg	J (all detects)
	SODIUM	J	97.8	112	PQL	mg/Kg	
	TIN	J	2.90	11.2	PQL	mg/Kg	
	Zirconium	J	2.50	5.61	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-205-SA5B-SB-2.5-3.5	CADMIUM	J	0.0908	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0560	0.448	PQL	mg/Kg	
	SILVER	J	0.0557	0.112	PQL	mg/Kg	
SL-207-SA5B-SB-2.5-3.5	ANTIMONY	J	0.148	0.228	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.105	0.114	PQL	mg/Kg	
	SELENIUM	J	0.141	0.457	PQL	mg/Kg	
SL-210-SA5B-SB-4.0-5.0	ANTIMONY	J	0.107	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.102	0.418	PQL	mg/Kg	
SL-211-SA5B-SB-4.0-5.0	SELENIUM	J	0.129	0.439	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0630	0.110	PQL	mg/Kg	
SL-229-SA5B-SB-2.0-3.0	SELENIUM	J	0.0771	0.437	PQL	mg/Kg	J (all detects)
SL-230-SA5B-SB-2.0-3.0	CADMIUM	J	0.0654	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0689	0.449	PQL	mg/Kg	
SL-274-SA5B-SB-4.0-5.0	SELENIUM	J	0.124	0.440	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-205-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-207-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.76	1.1	PQL	mg/Kg	J (all detects)
SL-210-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.27	1.1	PQL	mg/Kg	J (all detects)
SL-211-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-230-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-274-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-205-SA5B-SB-2.5-3.5	MERCURY	J	0.0078	0.112	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE075 **Laboratory: LL**

EDD Filename: DE075_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-207-SA5B-SB-2.5-3.5	MERCURY	J	0.0093	0.109	PQL	mg/Kg	J (all detects)
SL-210-SA5B-SB-4.0-5.0	MERCURY	J	0.0109	0.105	PQL	mg/Kg	J (all detects)
SL-211-SA5B-SB-4.0-5.0	MERCURY	J	0.0059	0.111	PQL	mg/Kg	J (all detects)
SL-230-SA5B-SB-2.0-3.0	MERCURY	J	0.0059	0.108	PQL	mg/Kg	J (all detects)
SL-274-SA5B-SB-4.0-5.0	MERCURY	J	0.0095	0.108	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-205-SA5B-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.56	4.3	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.3	PQL	ug/Kg	
SL-207-SA5B-SB-2.5-3.5	ETHYLBENZENE	J	0.29	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	1.0	4.2	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.43	4.2	PQL	ug/Kg	
	TOLUENE	J	0.1	4.2	PQL	ug/Kg	
SL-210-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.50	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.2	PQL	ug/Kg	
SL-211-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.33	3.6	PQL	ug/Kg	J (all detects)
SL-229-SA5B-SB-2.0-3.0	ETHYLBENZENE	J	0.21	4.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.81	4.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.57	4.7	PQL	ug/Kg	
	TOLUENE	J	0.10	4.7	PQL	ug/Kg	
SL-230-SA5B-SB-2.0-3.0	ETHYLBENZENE	J	0.17	4.0	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.56	4.0	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.53	4.0	PQL	ug/Kg	
SL-274-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.11	3.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.33	3.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.45	3.7	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-229-SA5B-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	370	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE075 Laboratory: LL

EDD Filename: DE075_v1 eQAPP Name: CDM_SSFL_110509

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-274-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	20	PQL	ug/Kg	J (all detects)

LDC #: 25750Z4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/4/4

SDG #: DE075 ADR

Laboratory: Lancaster Laboratories

Reviewer: CR

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (SDG: DE074)
VII.	Duplicate Sample Analysis	N	D/P ↓
VIII.	Laboratory Control Samples (LCS)	N	
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	See WS from SDG: DE074 (J/UJ) (Al, Ca, Fe, Li, Mg, Mn, P, K, Sr, Ti)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=1,2

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	EB28-SA5B-020311 W	11		21		31	
2	EB29-SA5B-020311 W	12		22		32	
3	SL-205-SA5B-SB-2.5-3.5	13		23		33	
4	SL-207-SA5B-SB-2.5-3.5	14		24		34	
5	SL-210-SA5B-SB-4.0-5.0	15		25		35	
6	SL-211-SA5B-SB-4.0-5.0	16		26		36	
7	SL-229-SA5B-SB-2.0-3.0	17		27		37	
8	SL-230-SA5B-SB-2.0-3.0	18		28		38	
9	SL-274-SA5B-SB-4.0-5.0	19		29		39	
10		20		30		40	

Notes:

LDC #: 25750Z 4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
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	3	4	5	6	7	8	9										
Zr			7.1	3.55	2.5	2.0	2.2	2.3	1.0	1.4	2.5										

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.

SAMPLE DELIVERY GROUP

DE076

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
04-Feb-2011	TB-020411	6199409	TB	5030B	8260B	III
04-Feb-2011	TB-020411	6199409	TB	5030B	8260B SIM	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	3050B	6010B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	3060A	7199	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	3550B	8082	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	3550B	8270C	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	3550B	8270C SIM	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	5035	8260B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	5035	8260B SIM	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	Gen Prep	9045M	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	METHOD	300.0	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	METHOD	314.0	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0	6199403	N	METHOD	7471A	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D220847	DUP	METHOD	7471A	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D220925A	DUP	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D220925B	DUP	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D220925C	DUP	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D220925D	DUP	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D221502A	DUP	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D222253	DUP	3050B	6010B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D270139A	DUP	METHOD	314.0	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D270510A	DUP	3060A	7199	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0DUP	P199403D272242B	DUP	METHOD	300.0	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M220849	MSD	METHOD	7471A	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M220931A	MSD	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
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M220931B	MSD	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M220931C	MSD	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M220931D	MSD	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M221505A	MSD	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M222254	MSD	3050B	6010B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M222301	MSD	3050B	6010B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M260704	MSD	3550B	8270C	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MSD	P199403M261600	MSD	3550B	8270C SIM	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R220848	MS	METHOD	7471A	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R220928A	MS	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R220928B	MS	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R220928C	MS	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R220928D	MS	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R221504A	MS	3050B	6020	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R222250	MS	3050B	6010B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R222257	MS	3050B	6010B	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R260637	MS	3550B	8270C	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R261529	MS	3550B	8270C SIM	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R270203A	MS	METHOD	314.0	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R270438A	MS	3060A	7199	III
04-Feb-2011	SL-041-SA5C-SB-4.0-5.0MS	P199403R272258B	MS	METHOD	300.0	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	3050B	6010B	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	3050B	6020	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	3060A	7199	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	3550B	8082	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	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
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	3550B	8270C SIM	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	5035	8260B	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	5035	8260B SIM	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	Gen Prep	9045M	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	METHOD	300.0	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	METHOD	314.0	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	METHOD	6850	III
04-Feb-2011	SL-165-SA5B-SB-4.0-5.0	6199406	N	METHOD	7471A	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	3050B	6010B	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	3050B	6020	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	3060A	7199	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	3550B	8082	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	3550B	8270C	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	3550B	8270C SIM	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	5035	8260B	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	5035	8260B SIM	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	Gen Prep	9045M	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	METHOD	300.0	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	METHOD	314.0	III
04-Feb-2011	SL-159-SA5B-SB-4.0-5.0	6199404	N	METHOD	7471A	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	3050B	6010B	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	3050B	6020	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	3060A	7199	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	3550B	8082	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	3550B	8270C	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	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
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	5035	8260B	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	5035	8260B SIM	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	Gen Prep	9045M	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	METHOD	300.0	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	METHOD	314.0	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0	6199405	N	METHOD	7471A	III
04-Feb-2011	SL-159-SA5B-SB-8.0-9.0DUP	P199405D291315B	DUP	Gen Prep	9045M	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	3050B	6010B	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	3050B	6020	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	3060A	7199	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	3550B	8082	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	3550B	8270C	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	3550B	8270C SIM	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	5035	8260B	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	5035	8260B SIM	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	Gen Prep	9045M	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	METHOD	300.0	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	METHOD	314.0	III
04-Feb-2011	SL-273-SA5B-SB-2.0-3.0	6199408	N	METHOD	7471A	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	3050B	6010B	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	3050B	6020	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	3060A	7199	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	3550B	8082	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	3550B	8270C	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	3550B	8270C SIM	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	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
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	5035	8260B SIM	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	Gen Prep	9045M	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	METHOD	300.0	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	N	METHOD	314.0	III
04-Feb-2011	SL-272-SA5B-SB-4.0-5.0	6199407	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: DE076 Laboratory: LL

EDD Filename: PrepDE076_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-159-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 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	1.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 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	2.0		0.98	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-272-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-273-SA5B-SB-2.0-3.0 *Collected:* 2/4/2011 1:57:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	8.0		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B Matrix: SO

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	31100		5.68	MDL	22.6	PQL	mg/Kg	J	E
LITHIUM	35.4		0.25	MDL	2.3	PQL	mg/Kg	J	E
MAGNESIUM	7140		2.87	MDL	11.3	PQL	mg/Kg	J	E

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory:** LL

EDD Filename: PrepDE076_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	228		0.632	MDL	11.3	PQL	mg/Kg	J	Q
TIN	3.36	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.34	J	0.948	MDL	5.64	PQL	mg/Kg	U	B

Sample ID: SL-159-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 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	21200		5.65	MDL	22.5	PQL	mg/Kg	J	E
LITHIUM	36.1		0.25	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	5550		2.85	MDL	11.2	PQL	mg/Kg	J	E
PHOSPHORUS	133		0.629	MDL	11.2	PQL	mg/Kg	J	Q
SODIUM	110	J	41.9	MDL	112	PQL	mg/Kg	J	Z
TIN	2.88	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.52	J	0.943	MDL	5.61	PQL	mg/Kg	U	B

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 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	15500		6.14	MDL	24.4	PQL	mg/Kg	J	E
BORON	1.09	J	1.09	MDL	6.11	PQL	mg/Kg	J	Z
LITHIUM	35.8		0.27	MDL	2.4	PQL	mg/Kg	J	E
MAGNESIUM	5130		3.10	MDL	12.2	PQL	mg/Kg	J	E
PHOSPHORUS	373		0.684	MDL	12.2	PQL	mg/Kg	J	Q
TIN	3.20	J	1.22	MDL	12.2	PQL	mg/Kg	U	B
Zirconium	1.90	J	1.03	MDL	6.11	PQL	mg/Kg	U	B

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	18100		5.47	MDL	21.7	PQL	mg/Kg	J	E
BORON	2.12	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
LITHIUM	22.8		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	3850		2.76	MDL	10.9	PQL	mg/Kg	J	E
PHOSPHORUS	355		0.609	MDL	10.9	PQL	mg/Kg	J	Q
SODIUM	90.7	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.76	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-165-SA5B-SB-4.0-5.0 **Collected:** 2/4/2011 10:04:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.50	J	0.913	MDL	5.44	PQL	mg/Kg	U	B

Sample ID: SL-272-SA5B-SB-4.0-5.0 **Collected:** 2/4/2011 3:10:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	19100		5.43	MDL	21.6	PQL	mg/Kg	J	E
LITHIUM	21.6		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	4430		2.74	MDL	10.8	PQL	mg/Kg	J	E
PHOSPHORUS	152		0.604	MDL	10.8	PQL	mg/Kg	J	Q
SODIUM	94.2	J	40.2	MDL	108	PQL	mg/Kg	J	Z
TIN	2.94	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.46	J	0.906	MDL	5.39	PQL	mg/Kg	U	B

Sample ID: SL-273-SA5B-SB-2.0-3.0 **Collected:** 2/4/2011 1:57:00 PM **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	21500		5.55	MDL	22.1	PQL	mg/Kg	J	E
LITHIUM	43.3		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	6090		2.80	MDL	11.0	PQL	mg/Kg	J	E
PHOSPHORUS	524		0.618	MDL	11.0	PQL	mg/Kg	J	Q
SODIUM	99.3	J	41.2	MDL	110	PQL	mg/Kg	J	Z
TIN	3.62	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	2.58	J	0.927	MDL	5.52	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-041-SA5C-SB-4.0-5.0 **Collected:** 2/4/2011 9:23:00 AM **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0867	J	0.0439	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	30.4		0.132	MDL	0.439	PQL	mg/Kg	J	Q
COBALT	9.15		0.0219	MDL	0.110	PQL	mg/Kg	J	E
COPPER	12.8		0.0724	MDL	0.439	PQL	mg/Kg	J	Q
VANADIUM	56.6		0.0241	MDL	0.110	PQL	mg/Kg	J	E

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory:** LL

EDD Filename: PrepDE076_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.101	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0658	MDL	0.219	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.29		0.0877	MDL	0.439	PQL	mg/Kg	J	E
BERYLLIUM	0.996		0.0175	MDL	0.110	PQL	mg/Kg	J	Q
LEAD	10.1		0.0114	MDL	0.219	PQL	mg/Kg	J	E, Q
SILVER	0.0463	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.367		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-159-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 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
CADMIUM	0.0617	J	0.0445	MDL	0.111	PQL	mg/Kg	J	Z
CHROMIUM	23.1		0.133	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	4.78		0.0222	MDL	0.111	PQL	mg/Kg	J	E
COPPER	7.69		0.0734	MDL	0.445	PQL	mg/Kg	J	Q
VANADIUM	39.7		0.0245	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-159-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 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	0.105	J	0.0667	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	10.7		0.0889	MDL	0.445	PQL	mg/Kg	J	E
BERYLLIUM	0.628		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
LEAD	5.82		0.0116	MDL	0.222	PQL	mg/Kg	J	E, Q
SILVER	0.0965	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
THALLIUM	0.232		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 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
CHROMIUM	19.1		0.147	MDL	0.488	PQL	mg/Kg	J	Q
COBALT	2.96		0.0244	MDL	0.122	PQL	mg/Kg	J	E

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory:** LL

EDD Filename: PrepDE076_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 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
COPPER	6.65		0.0806	MDL	0.488	PQL	mg/Kg	J	Q
VANADIUM	26.2		0.0269	MDL	0.122	PQL	mg/Kg	J	E

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 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
ANTIMONY	0.100	J	0.0733	MDL	0.244	PQL	mg/Kg	J	Z, Q, E
ARSENIC	9.89		0.0977	MDL	0.488	PQL	mg/Kg	J	E
BERYLLIUM	0.442		0.0195	MDL	0.122	PQL	mg/Kg	J	Q
LEAD	3.11		0.0127	MDL	0.244	PQL	mg/Kg	J	E, Q
THALLIUM	0.239		0.0366	MDL	0.122	PQL	mg/Kg	J	Q

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	20.3		0.130	MDL	0.435	PQL	mg/Kg	J	Q
COBALT	6.66		0.0217	MDL	0.109	PQL	mg/Kg	J	E
COPPER	11.0		0.0718	MDL	0.435	PQL	mg/Kg	J	Q
THALLIUM	0.286		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	37.0		0.0239	MDL	0.109	PQL	mg/Kg	J	E

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *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	0.0652	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.52		0.0870	MDL	0.435	PQL	mg/Kg	J	E
BERYLLIUM	0.622		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
LEAD	7.29		0.0113	MDL	0.217	PQL	mg/Kg	J	E, Q
SILVER	0.0937	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory:** LL

EDD Filename: PrepDE076_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-272-SA5B-SB-4.0-5.0 ***Collected:*** 2/4/2011 3:10:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0608	J	0.0440	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	20.9		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	5.81		0.0220	MDL	0.110	PQL	mg/Kg	J	E
COPPER	8.54		0.0726	MDL	0.440	PQL	mg/Kg	J	Q
VANADIUM	41.4		0.0242	MDL	0.110	PQL	mg/Kg	J	E

Sample ID: SL-272-SA5B-SB-4.0-5.0 ***Collected:*** 2/4/2011 3:10:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0641	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SL-272-SA5B-SB-4.0-5.0 ***Collected:*** 2/4/2011 3:10:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.101	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.86		0.0880	MDL	0.440	PQL	mg/Kg	J	E
BERYLLIUM	0.728		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
LEAD	6.12		0.0114	MDL	0.220	PQL	mg/Kg	J	E, Q
SILVER	0.0290	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
THALLIUM	0.228		0.0330	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-273-SA5B-SB-2.0-3.0 ***Collected:*** 2/4/2011 1:57:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	29.4		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	6.26		0.0223	MDL	0.111	PQL	mg/Kg	J	E
COPPER	21.2		0.0735	MDL	0.446	PQL	mg/Kg	J	Q
VANADIUM	37.5		0.0245	MDL	0.111	PQL	mg/Kg	J	E

Sample ID: SL-273-SA5B-SB-2.0-3.0 ***Collected:*** 2/4/2011 1:57:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.216	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-273-SA5B-SB-2.0-3.0 *Collected:* 2/4/2011 1:57:00 PM *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0668	U	0.0668	MDL	0.223	PQL	mg/Kg	UJ	Q, E
ARSENIC	7.15		0.0891	MDL	0.446	PQL	mg/Kg	J	E
BERYLLIUM	0.683		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
LEAD	16.5		0.0116	MDL	0.223	PQL	mg/Kg	J	E, Q
THALLIUM	0.267		0.0334	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-159-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 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	0.0054	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 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
MERCURY	0.0190	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0071	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-272-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0036	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-273-SA5B-SB-2.0-3.0 *Collected:* 2/4/2011 1:57:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0737	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *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	1.2	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 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
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	R	Q

Method Category: SVOA

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

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.2	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory:** LL

EDD Filename: PrepDE076_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-041-SA5C-SB-4.0-5.0 ***Collected:*** 2/4/2011 9:23:00 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
DIBENZO(A,H)ANTHRACENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
FLUORENE	1.4	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-159-SA5B-SB-4.0-5.0 ***Collected:*** 2/4/2011 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	11	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.7	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.9	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	6.8	MDL	20	PQL	ug/Kg	J	Z
N-NITROSODIMETHYLAMINE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-159-SA5B-SB-8.0-9.0 ***Collected:*** 2/4/2011 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
BIS(2-ETHYLHEXYL)PHTHALATE	8.3	J	7.3	MDL	22	PQL	ug/Kg	J	Z

Sample ID: SL-165-SA5B-SB-4.0-5.0 ***Collected:*** 2/4/2011 10:04:00 ***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	9.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-272-SA5B-SB-4.0-5.0 ***Collected:*** 2/4/2011 3:10:00 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	7.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-273-SA5B-SB-2.0-3.0 ***Collected:*** 2/4/2011 1:57:00 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-METHYLNAPHTHALENE	0.83	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-273-SA5B-SB-2.0-3.0 *Collected:* 2/4/2011 1:57:00 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
ACENAPHTHYLENE	0.48	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.3	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.8	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-041-SA5C-SB-4.0-5.0 *Collected:* 2/4/2011 9:23:00 AM *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.7	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.25	J	0.06	MDL	3.7	PQL	ug/Kg	U	B
m,p-Xylene	0.82	J	0.16	MDL	3.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.39	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-159-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 11:35:00 *Analysis Type:* RES *Dilution:* 0.81

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.7	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.08	J	0.06	MDL	3.7	PQL	ug/Kg	U	B
m,p-Xylene	0.30	J	0.16	MDL	3.7	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.32	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-159-SA5B-SB-8.0-9.0 *Collected:* 2/4/2011 11:50:00 *Analysis Type:* RES *Dilution:* 0.96

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.19	U	0.19	MDL	4.7	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.48	J	0.28	MDL	4.7	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.7	PQL	ug/Kg	U	B

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 0.79

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,1,2-TETRACHLOROETHANE	0.1	U	0.1	MDL	3.5	PQL	ug/Kg	UJ	S
1,1,1-TRICHLOROETHANE	0.18	U	0.18	MDL	3.5	PQL	ug/Kg	UJ	S

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 0.79

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,1,2,2-TETRACHLOROETHANE	0.20	U	0.20	MDL	3.5	PQL	ug/Kg	UJ	S
1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	0.1	U	0.1	MDL	3.5	PQL	ug/Kg	UJ	S
1,1,2-TRICHLOROETHANE	0.24	U	0.24	MDL	3.5	PQL	ug/Kg	UJ	S
1,1-DICHLOROETHANE	0.09	U	0.09	MDL	3.5	PQL	ug/Kg	UJ	S
1,1-DICHLOROETHENE	0.35	U	0.35	MDL	3.5	PQL	ug/Kg	UJ	S
1,1-DICHLOROPROPENE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
1,2,3-TRICHLOROBENZENE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
1,2,3-TRICHLOROPROPANE	0.29	U	0.29	MDL	3.5	PQL	ug/Kg	UJ	S
1,2,4-TRICHLOROBENZENE	0.16	U	0.16	MDL	3.5	PQL	ug/Kg	UJ	S
1,2,4-TRIMETHYLBENZENE	0.35	U	0.35	MDL	3.5	PQL	ug/Kg	UJ	S
1,2-DIBROMO-3-CHLOROPROPANE	0.62	U	0.62	MDL	3.5	PQL	ug/Kg	UJ	S
1,2-Dibromoethane (EDB)	0.15	U	0.15	MDL	3.5	PQL	ug/Kg	UJ	S
1,2-DICHLOROBENZENE	0.08	U	0.08	MDL	3.5	PQL	ug/Kg	UJ	S
1,2-DICHLOROETHANE	0.13	U	0.13	MDL	3.5	PQL	ug/Kg	UJ	S
1,2-DICHLOROPROPANE	0.15	U	0.15	MDL	3.5	PQL	ug/Kg	UJ	S
1,3,5-TRIMETHYLBENZENE	0.09	U	0.09	MDL	3.5	PQL	ug/Kg	UJ	S
1,3-DICHLOROBENZENE	0.11	U	0.11	MDL	3.5	PQL	ug/Kg	UJ	S
1,3-DICHLOROPROPANE	0.07	U	0.07	MDL	3.5	PQL	ug/Kg	UJ	S
1,4-DICHLOROBENZENE	0.14	U	0.14	MDL	3.5	PQL	ug/Kg	UJ	S
2,2-DICHLOROPROPANE	0.15	U	0.15	MDL	3.5	PQL	ug/Kg	UJ	S
2-BUTANONE (MEK)	1.1	U	1.1	MDL	7.1	PQL	ug/Kg	UJ	S
2-Chloro-1,1,1-trifluoroethane	0.44	U	0.44	MDL	4.4	PQL	ug/Kg	UJ	S
2-CHLOROETHYL VINYL ETHER	0.27	U	0.27	MDL	3.5	PQL	ug/Kg	UJ	S
2-CHLOROTOLUENE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
2-HEXANONE	1.4	U	1.4	MDL	7.1	PQL	ug/Kg	UJ	S
4-CHLOROTOLUENE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
4-METHYL-2-PENTANONE (MIBK)	0.35	U	0.35	MDL	7.1	PQL	ug/Kg	UJ	S
ACETONE	5.9	U	5.9	MDL	7.1	PQL	ug/Kg	UJ	S
BENZENE	0.09	U	0.09	MDL	3.5	PQL	ug/Kg	UJ	S
BROMOBENZENE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
BROMOCHLOROMETHANE	0.29	U	0.29	MDL	3.5	PQL	ug/Kg	UJ	S
BROMODICHLOROMETHANE	0.07	U	0.07	MDL	3.5	PQL	ug/Kg	UJ	S
BROMOFORM	0.35	U	0.35	MDL	3.5	PQL	ug/Kg	UJ	S
BROMOMETHANE	0.22	U	0.22	MDL	3.5	PQL	ug/Kg	UJ	S
CARBON TETRACHLORIDE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-165-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 10:04:00 *Analysis Type:* RES *Dilution:* 0.79

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROBENZENE	0.1	U	0.1	MDL	3.5	PQL	ug/Kg	UJ	S
CHLOROETHANE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
CHLOROFORM	0.11	U	0.11	MDL	3.5	PQL	ug/Kg	UJ	S
CHLOROMETHANE	0.29	U	0.29	MDL	3.5	PQL	ug/Kg	UJ	S
Chlorotrifluoroethylene	0.44	U	0.44	MDL	4.4	PQL	ug/Kg	UJ	S
CIS-1,2-DICHLOROETHENE	0.17	U	0.17	MDL	3.5	PQL	ug/Kg	UJ	S
CIS-1,3-DICHLOROPROPENE	0.14	U	0.14	MDL	3.5	PQL	ug/Kg	UJ	L, S
DIBROMOCHLOROMETHANE	0.18	U	0.18	MDL	3.5	PQL	ug/Kg	UJ	S
DIBROMOMETHANE	0.21	U	0.21	MDL	3.5	PQL	ug/Kg	UJ	S
DICHLORODIFLUOROMETHANE	0.11	U	0.11	MDL	3.5	PQL	ug/Kg	UJ	S
ETHYLBENZENE	0.20	J	0.05	MDL	3.5	PQL	ug/Kg	UJ	B, S
HEXACHLOROBUTADIENE	0.12	U	0.12	MDL	3.5	PQL	ug/Kg	UJ	S
ISOPROPYLBENZENE	0.05	U	0.05	MDL	3.5	PQL	ug/Kg	UJ	S
m,p-Xylene	0.69	J	0.15	MDL	3.5	PQL	ug/Kg	UJ	B, S
METHYL TERT-BUTYL ETHER (MTBE)	0.19	U	0.19	MDL	3.5	PQL	ug/Kg	UJ	S
METHYLENE CHLORIDE	0.33	J	0.21	MDL	3.5	PQL	ug/Kg	UJ	B, S
N-BUTYLBENZENE	0.11	U	0.11	MDL	3.5	PQL	ug/Kg	UJ	S
N-PROPYLBENZENE	0.06	U	0.06	MDL	3.5	PQL	ug/Kg	UJ	S
O-XYLENE	0.15	U	0.15	MDL	3.5	PQL	ug/Kg	UJ	S
P-ISOPROPYLTOLUENE	0.1	U	0.1	MDL	3.5	PQL	ug/Kg	UJ	S
SEC-BUTYLBENZENE	0.05	U	0.05	MDL	3.5	PQL	ug/Kg	UJ	S
STYRENE	0.09	U	0.09	MDL	3.5	PQL	ug/Kg	UJ	S
TERT-BUTYLBENZENE	0.14	U	0.14	MDL	3.5	PQL	ug/Kg	UJ	S
TETRACHLOROETHENE	0.18	U	0.18	MDL	3.5	PQL	ug/Kg	UJ	S
TOLUENE	0.07	U	0.07	MDL	3.5	PQL	ug/Kg	UJ	S
TRANS-1,2-DICHLOROETHENE	0.11	U	0.11	MDL	3.5	PQL	ug/Kg	UJ	S
TRANS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.5	PQL	ug/Kg	UJ	S
TRICHLOROETHENE	0.13	U	0.13	MDL	3.5	PQL	ug/Kg	UJ	S
TRICHLOROFLUOROMETHANE	0.26	U	0.26	MDL	3.5	PQL	ug/Kg	UJ	S
VINYL CHLORIDE	0.18	U	0.18	MDL	3.5	PQL	ug/Kg	UJ	S

Sample ID: SL-272-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.6	PQL	ug/Kg	UJ	L

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory:** LL

EDD Filename: PrepDE076_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-272-SA5B-SB-4.0-5.0 *Collected:* 2/4/2011 3:10:00 PM *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.41	J	0.22	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.07	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-273-SA5B-SB-2.0-3.0 *Collected:* 2/4/2011 1:57:00 PM *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	3.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.41	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: PrepDE076_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE076

Method Blank Outlier Report

Lab Reporting Batch ID: DE076 Laboratory: LL

EDD Filename: DE076_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03808AB222233	2/9/2011 10:33:00 PM	CALCIUM	7.54 mg/Kg	SL-041-SA5C-SB-4.0-5.0
		PHOSPHORUS	0.685 mg/Kg	SL-159-SA5B-SB-4.0-5.0
		TIN	1.32 mg/Kg	SL-159-SA5B-SB-8.0-9.0
				SL-165-SA5B-SB-4.0-5.0
				SL-272-SA5B-SB-4.0-5.0
				SL-273-SA5B-SB-2.0-3.0

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-SA5C-SB-4.0-5.0(RES)	TIN	3.38 mg/Kg	3.36U mg/Kg
SL-159-SA5B-SB-4.0-5.0(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-159-SA5B-SB-8.0-9.0(RES)	TIN	3.20 mg/Kg	3.20U mg/Kg
SL-165-SA5B-SB-4.0-5.0(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-272-SA5B-SB-4.0-5.0(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SL-273-SA5B-SB-2.0-3.0(RES)	TIN	3.62 mg/Kg	3.62U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB65B211254A	2/7/2011 12:54:00 PM	ETHYLBENZENE	0.08 ug/Kg	SL-041-SA5C-SB-4.0-5.0
		m,p-Xylene	0.20 ug/Kg	SL-159-SA5B-SB-4.0-5.0
		METHYLENE CHLORIDE	0.40 ug/Kg	SL-159-SA5B-SB-8.0-9.0
		TOLUENE	0.31 ug/Kg	SL-165-SA5B-SB-4.0-5.0
				SL-272-SA5B-SB-4.0-5.0
				SL-273-SA5B-SB-2.0-3.0

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-SA5C-SB-4.0-5.0(RES)	ETHYLBENZENE	0.25 ug/Kg	3.7U ug/Kg
SL-041-SA5C-SB-4.0-5.0(RES)	m,p-Xylene	0.82 ug/Kg	3.7U ug/Kg
SL-041-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.39 ug/Kg	3.7U ug/Kg
SL-159-SA5B-SB-4.0-5.0(RES)	ETHYLBENZENE	0.08 ug/Kg	3.7U ug/Kg
SL-159-SA5B-SB-4.0-5.0(RES)	m,p-Xylene	0.30 ug/Kg	3.7U ug/Kg
SL-159-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.32 ug/Kg	3.7U ug/Kg
SL-159-SA5B-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	4.7U ug/Kg
SL-159-SA5B-SB-8.0-9.0(RES)	TOLUENE	0.11 ug/Kg	4.7U ug/Kg
SL-165-SA5B-SB-4.0-5.0(RES)	ETHYLBENZENE	0.20 ug/Kg	3.5U ug/Kg
SL-165-SA5B-SB-4.0-5.0(RES)	m,p-Xylene	0.69 ug/Kg	3.5U ug/Kg
SL-165-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.33 ug/Kg	3.5U ug/Kg
SL-272-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	3.6U ug/Kg
SL-272-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.08 ug/Kg	3.6U ug/Kg
SL-273-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.41 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_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-041-SA5C-SB-4.0-5.0MS **SL-041-SA5C-SB-4.0-5.0MSD** (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	ARSENIC LEAD VANADIUM ZINC	13 6 29 -7	- - 155 -	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	22 (20.00) 32 (20.00) 21 (20.00) -	ARSENIC LEAD VANADIUM ZINC	J (all detects) UJ(all non-detects) As, V, Zn, No Qual %R >4x Pb post digestion Spike 94%
SL-041-SA5C-SB-4.0-5.0MS **SL-041-SA5C-SB-4.0-5.0MSD** (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	ANTIMONY BERYLLIUM CHROMIUM COPPER THALLIUM	51 73 73 72 73	35 - - - -	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	28 (20.00) - - - -	ANTIMONY BERYLLIUM CHROMIUM COPPER THALLIUM	 J(all detects) UJ(all non-detects)
SL-041-SA5C-SB-4.0-5.0MS **SL-041-SA5C-SB-4.0-5.0MSD** (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	BARIUM	-1	193	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-041-SA5C-SB-4.0-5.0MS (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	TITANIUM	131	-	75.00-125.00	-	TITANIUM	 No Qual, >4x
SL-041-SA5C-SB-4.0-5.0MS **SL-041-SA5C-SB-4.0-5.0MSD** (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE	-1059 -29 -6092 -482 -110	-271 -8 -6324 -500 -19	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM CALCIUM IRON MAGNESIUM MANGANESE	 No Qual, >4x
SL-041-SA5C-SB-4.0-5.0MSD (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	PHOSPHORUS	-	59	75.00-125.00	-	PHOSPHORUS	 J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_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-SA5C-SB-4.0-5.0MS SL-041-SA5C-SB-4.0-5.0MSD (SL-041-SA5C-SB-4.0-5.0)	2-METHYLPHENOL	136	121	75.00-111.00	-	2-METHYLPHENOL	J(all detects)
	4-CHLORO-3-METHYLPHENOL	124	113	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	
	4-METHYLPHENOL	137	117	71.00-111.00	-	4-METHYLPHENOL	
	BENZYL ALCOHOL	133	119	67.00-115.00	-	BENZYL ALCOHOL	
	ISOPHORONE	106	-	73.00-102.00	-	ISOPHORONE	
	N-NITROSO-DI-N-PROPYLAMIN	126	-	60.00-116.00	-	N-NITROSO-DI-N-PROPYLAMI	
	PHENOL	135	129	58.00-126.00	-	PHENOL	
SL-041-SA5C-SB-4.0-5.0MS SL-041-SA5C-SB-4.0-5.0MSD (SL-041-SA5C-SB-4.0-5.0)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R (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-041-SA5C-SB-4.0-5.0MS (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	FLUORIDE	54	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE076 Laboratory: LL

EDD Filename: DE076_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-SA5C-SB-4.0-5.0DUP (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	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-041-SA5C-SB-4.0-5.0DUP (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	ALUMINUM	21	20.00	J(all detects) UJ(all non-detects)
	LITHIUM	22	20.00	
	MAGNESIUM	23	20.00	
	Zirconium	21	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-041-SA5C-SB-4.0-5.0DUP (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	ANTIMONY	50	20.00	J(all detects) UJ(all non-detects)
	COBALT	27	20.00	Sb No Qual, Ok by difference

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-041-SA5C-SB-4.0-5.0DUP (SL-041-SA5C-SB-4.0-5.0 SL -159-SA5B-SB-4.0-5.0 SL -159-SA5B-SB-8.0-9.0 SL -165-SA5B-SB-4.0-5.0 SL -272-SA5B-SB-4.0-5.0 SL -273-SA5B-SB-2.0-3.0)	MERCURY	200	20.00	No Qual, Ok by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_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
P9LALCSQ260051 (SL-041-SA5C-SB-4.0-5.0 SL-159-SA5B-SB-4.0-5.0 SL-159-SA5B-SB-8.0-9.0 SL-165-SA5B-SB-4.0-5.0 SL-272-SA5B-SB-4.0-5.0 SL-273-SA5B-SB-2.0-3.0)	PHENOL	113	-	58.00-112.00	-	PHENOL	J (all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB65Q211337A (SL-041-SA5C-SB-4.0-5.0 SL-159-SA5B-SB-4.0-5.0 SL-159-SA5B-SB-8.0-9.0 SL-165-SA5B-SB-4.0-5.0 SL-272-SA5B-SB-4.0-5.0 SL-273-SA5B-SB-2.0-3.0)	CIS-1,3-DICHLOROPROPENE	79	-	80.00-120.00	-	CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_v1. **eQAPP Name: CDM_SSFL_110509**

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

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-165-SA5B-SB-4.0-5.0	4-Bromofluorobenzene	66	74.00-121.00	All Target Analytes	J(all detects) UJ(all non-detects)

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

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-159-SA5B-SB-4.0-5.0	Terphenyl-d14	143	45.00-135.00	No Affected Compounds	No Qual, One Out

Reporting Limit Outliers

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5C-SB-4.0-5.0	TIN	J	3.36	11.3	PQL	mg/Kg	J (all detects)
SL-159-SA5B-SB-4.0-5.0	SODIUM	J	110	112	PQL	mg/Kg	J (all detects)
	TIN	J	2.88	11.2	PQL	mg/Kg	
SL-159-SA5B-SB-8.0-9.0	BORON	J	1.09	6.11	PQL	mg/Kg	J (all detects)
	TIN	J	3.20	12.2	PQL	mg/Kg	
SL-165-SA5B-SB-4.0-5.0	BORON	J	2.12	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.7	109	PQL	mg/Kg	
	TIN	J	2.76	10.9	PQL	mg/Kg	
SL-272-SA5B-SB-4.0-5.0	SODIUM	J	94.2	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	10.8	PQL	mg/Kg	
SL-273-SA5B-SB-2.0-3.0	SODIUM	J	99.3	110	PQL	mg/Kg	J (all detects)
	TIN	J	3.62	11.0	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5C-SB-4.0-5.0	ANTIMONY	J	0.174	0.219	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0867	0.110	PQL	mg/Kg	
	SELENIUM	J	0.101	0.439	PQL	mg/Kg	
	SILVER	J	0.0463	0.110	PQL	mg/Kg	
SL-159-SA5B-SB-4.0-5.0	ANTIMONY	J	0.105	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0617	0.111	PQL	mg/Kg	
	SILVER	J	0.0965	0.111	PQL	mg/Kg	
SL-159-SA5B-SB-8.0-9.0	ANTIMONY	J	0.100	0.244	PQL	mg/Kg	J (all detects)
SL-165-SA5B-SB-4.0-5.0	ANTIMONY	J	0.114	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.136	0.435	PQL	mg/Kg	
	SILVER	J	0.0937	0.109	PQL	mg/Kg	
SL-272-SA5B-SB-4.0-5.0	ANTIMONY	J	0.101	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0608	0.110	PQL	mg/Kg	
	SELENIUM	J	0.0641	0.440	PQL	mg/Kg	
	SILVER	J	0.0290	0.110	PQL	mg/Kg	
SL-273-SA5B-SB-2.0-3.0	SELENIUM	J	0.216	0.446	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-165-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5B-SB-4.0-5.0	MERCURY	J	0.0054	0.108	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-159-SA5B-SB-8.0-9.0	MERCURY	J	0.0190	0.116	PQL	mg/Kg	J (all detects)
SL-165-SA5B-SB-4.0-5.0	MERCURY	J	0.0071	0.106	PQL	mg/Kg	J (all detects)
SL-272-SA5B-SB-4.0-5.0	MERCURY	J	0.0036	0.107	PQL	mg/Kg	J (all detects)
SL-273-SA5B-SB-2.0-3.0	MERCURY	J	0.0737	0.108	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-165-SA5B-SB-4.0-5.0	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5C-SB-4.0-5.0	ETHYLBENZENE	J	0.25	3.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.82	3.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.39	3.7	PQL	ug/Kg	
SL-159-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.08	3.7	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.30	3.7	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.32	3.7	PQL	ug/Kg	
SL-159-SA5B-SB-8.0-9.0	METHYLENE CHLORIDE	J	0.48	4.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.7	PQL	ug/Kg	
SL-165-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.20	3.5	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.69	3.5	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.33	3.5	PQL	ug/Kg	
SL-272-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.41	3.6	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	3.6	PQL	ug/Kg	
SL-273-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.41	3.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE076 **Laboratory: LL**

EDD Filename: DE076_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5C-SB-4.0-5.0	1-METHYLNAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	
	ACENAPHTHENE	J	1.2	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	1.2	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.9	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	FLUORENE	J	1.4	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.9	PQL	ug/Kg	
	PYRENE	J	1.6	1.9	PQL	ug/Kg	
SL-159-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	20	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.7	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.9	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	10	20	PQL	ug/Kg	
	N-NITROSODIMETHYLAMINE	J	1.3	1.9	PQL	ug/Kg	
SL-159-SA5B-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.3	22	PQL	ug/Kg	J (all detects)
SL-165-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.6	20	PQL	ug/Kg	J (all detects)
SL-272-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.9	20	PQL	ug/Kg	J (all detects)
SL-273-SA5B-SB-2.0-3.0	2-METHYLNAPHTHALENE	J	0.83	1.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.48	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	

LDC #: 25628A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/13/11
SDG #: DE076 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: IV

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: 5D
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, As, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn >4X)
VII.	Duplicate Sample Analysis	N	DUP (Sb, Hg, Zr <5x)
VIII.	Laboratory Control Samples (LCS)	N	LCS
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	—	
XV	Field Blanks	—	

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-041-SA5C-SB-4.0-5.0	11		21		31	
2	SL-159-SA5B-SB-4.0-5.0	12		22		32	
3	SL-159-SA5B-SB-8.0-9.0	13		23		33	
4	SL-165-SA5B-SB-4.0-5.0	14		24		34	
5	SL-272-SA5B-SB-4.0-5.0	15		25		35	
6	SL-273-SA5B-SB-2.0-3.0	16		26		36	
7	(#1) MS	17		27		37	
8	MSD	18		28		38	
9	DUP	19		29		39	
10		20		30		40	

Notes:

LDC #: 25628A4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: V

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-6		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: 7-9		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,

LDC #: 25628A4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

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				
Zr			6.9	3.45	2.3	2.5	1.9	1.5	2.5	2.6				

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.

SAMPLE DELIVERY GROUP

DE077

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
07-Feb-2011	TB-020711	6200292	TB	5030B	8260B	III
07-Feb-2011	TB-020711	6200292	TB	5030B	8260B SIM	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3050B	6010B	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3050B	6020	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3060A	7199	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3550B	8082	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3550B	8270C	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	3550B	8270C SIM	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	5035	8260B	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	5035	8260B SIM	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	Gen Prep	9045M	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	METHOD	300.0	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	METHOD	314.0	III
07-Feb-2011	SL-160-SA5B-SB-4.0-5.0	6200288	N	METHOD	7471A	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3050B	6010B	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3050B	6020	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3060A	7199	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3550B	8082	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3550B	8270C	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	3550B	8270C SIM	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	5035	8260B	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	5035	8260B SIM	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	Gen Prep	9045M	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	METHOD	300.0	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	N	METHOD	314.0	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0	6200290	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0DUP	P200290D270652B	DUP	METHOD	314.0	III
07-Feb-2011	SL-162-SA5B-SB-4.0-5.0MS	P200290R270740B	MS	METHOD	314.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3060A	7199	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3550B	8082	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3550B	8270C	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	3550B	8270C SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	5035	8260B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	5035	8260B SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	Gen Prep	9045M	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	METHOD	300.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	METHOD	314.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0	6200286	N	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221103	DUP	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221116A	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221116C	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221116D	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221539	DUP	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221635A	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D221635B	DUP	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D222125	DUP	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D271307A	DUP	METHOD	300.0	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0DUP	P200286D291330A	DUP	Gen Prep	9045M	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221122A	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221122C	MSD	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
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221122D	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221541	MSD	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221640A	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M221640B	MSD	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M222133	MSD	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M241940A	MSD	3550B	8082	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MSD	P200286M261036	MSD	3550B	8270C SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221119A	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221119C	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221119D	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221540	MS	METHOD	7471A	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221638A	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R221638B	MS	3050B	6020	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R222128	MS	3050B	6010B	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R241922A	MS	3550B	8082	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R261005	MS	3550B	8270C SIM	III
07-Feb-2011	SL-048-SA5A-SB-3.0-4.0MS	P200286R271322A	MS	METHOD	300.0	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3050B	6010B	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3050B	6020	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3060A	7199	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3550B	8082	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3550B	8270C	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	3550B	8270C SIM	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	5035	8260B	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	5035	8260B SIM	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	Gen Prep	9045M	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-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	METHOD	300.0	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	METHOD	314.0	III
07-Feb-2011	SL-161-SA5B-SB-4.0-5.0	6200289	N	METHOD	7471A	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3050B	6010B	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3050B	6020	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3060A	7199	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3550B	8082	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3550B	8270C	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	3550B	8270C SIM	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	5035	8260B	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	5035	8260B SIM	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	Gen Prep	9045M	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	METHOD	300.0	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	METHOD	314.0	III
07-Feb-2011	SL-049-SA5A-SB-2.0-3.0	6200287	N	METHOD	7471A	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3050B	6010B	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3050B	6020	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3060A	7199	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3550B	8082	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3550B	8270C	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	3550B	8270C SIM	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	5035	8260B	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	5035	8260B SIM	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	Gen Prep	9045M	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	METHOD	300.0	III
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	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
07-Feb-2011	SL-163-SA5B-SB-3.5-4.5	6200291	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GEN CHEM

Method: 300.0 **Matrix: SO**

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 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
FLUORIDE	1.1	J	0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***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

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 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
PHOSPHORUS	378		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1960		19.4	MDL	53.8	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 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
SODIUM	102	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.09	J	0.904	MDL	5.38	PQL	mg/Kg	U	B

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	517		0.619	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3100		19.9	MDL	55.2	PQL	mg/Kg	J	Q
SODIUM	68.3	J	41.2	MDL	110	PQL	mg/Kg	J	Z
TIN	2.44	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.72	J	0.928	MDL	5.52	PQL	mg/Kg	U	B

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	224		0.606	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1620		19.5	MDL	54.1	PQL	mg/Kg	J	Q
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.18	J	0.909	MDL	5.41	PQL	mg/Kg	U	B

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	255		0.607	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	1860		19.5	MDL	54.2	PQL	mg/Kg	J	Q
TIN	2.70	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.64	J	0.911	MDL	5.42	PQL	mg/Kg	U	B

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	183		0.613	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	1460		19.7	MDL	54.7	PQL	mg/Kg	J	Q
TIN	2.85	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.96	J	0.919	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	214		0.592	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	1840		19.0	MDL	52.8	PQL	mg/Kg	J	Q
TIN	2.83	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.42	J	0.887	MDL	5.28	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.147	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
COPPER	8.40		0.0724	MDL	0.439	PQL	mg/Kg	J	A
NICKEL	16.3		0.110	MDL	0.439	PQL	mg/Kg	J	A

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	57.3		0.119	MDL	0.439	PQL	mg/Kg	J	E

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0580	J	0.0439	MDL	0.110	PQL	mg/Kg	J	Z
CHROMIUM	24.3		0.132	MDL	0.439	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-048-SA5A-SB-3.0-4.0 ***Collected:*** 2/7/2011 12:28:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0191	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5A-SB-2.0-3.0 ***Collected:*** 2/7/2011 3:19:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0663	MDL	0.221	PQL	mg/Kg	J	Z, Q
COPPER	9.29		0.0729	MDL	0.442	PQL	mg/Kg	J	A
NICKEL	12.7		0.110	MDL	0.442	PQL	mg/Kg	J	A

Sample ID: SL-049-SA5A-SB-2.0-3.0 ***Collected:*** 2/7/2011 3:19:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5A-SB-2.0-3.0 ***Collected:*** 2/7/2011 3:19:00 PM ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.5		0.119	MDL	0.442	PQL	mg/Kg	J	E

Sample ID: SL-049-SA5A-SB-2.0-3.0 ***Collected:*** 2/7/2011 3:19:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	17.8		0.133	MDL	0.442	PQL	mg/Kg	J	A
SILVER	0.0343	J	0.0133	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-160-SA5B-SB-4.0-5.0 ***Collected:*** 2/7/2011 10:23:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0656	MDL	0.219	PQL	mg/Kg	J	Z, Q
COPPER	7.54		0.0721	MDL	0.437	PQL	mg/Kg	J	A
NICKEL	13.7		0.109	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: SL-160-SA5B-SB-4.0-5.0 ***Collected:*** 2/7/2011 10:23:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0841	J	0.0437	MDL	0.437	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	76.2		0.118	MDL	0.437	PQL	mg/Kg	J	E

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	20.9		0.131	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0919	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q
COPPER	8.48		0.0702	MDL	0.425	PQL	mg/Kg	J	A
NICKEL	13.4		0.106	MDL	0.425	PQL	mg/Kg	J	A

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0823	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.115	MDL	0.425	PQL	mg/Kg	J	E

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.105	J	0.0425	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	21.5		0.128	MDL	0.425	PQL	mg/Kg	J	A

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.121	J	0.0650	MDL	0.217	PQL	mg/Kg	J	Z, Q
COPPER	9.81		0.0715	MDL	0.434	PQL	mg/Kg	J	A
NICKEL	13.5		0.108	MDL	0.434	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0529	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	81.3		0.117	MDL	0.434	PQL	mg/Kg	J	E

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	24.3		0.130	MDL	0.434	PQL	mg/Kg	J	A

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
COPPER	8.33		0.0684	MDL	0.414	PQL	mg/Kg	J	A
NICKEL	13.5		0.104	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.122	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110		0.112	MDL	0.414	PQL	mg/Kg	J	E

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.9		0.124	MDL	0.414	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-162-SA5B-SB-4.0-5.0 ***Collected:*** 2/7/2011 11:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-162-SA5B-SB-4.0-5.0 ***Collected:*** 2/7/2011 11:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0122	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-163-SA5B-SB-3.5-4.5 ***Collected:*** 2/7/2011 3:36:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0058	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-048-SA5A-SB-3.0-4.0 ***Collected:*** 2/7/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-049-SA5A-SB-2.0-3.0 ***Collected:*** 2/7/2011 3:19:00 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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***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	2.3		0.43	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, S, L

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 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	9.3		0.37	MDL	1.9	PQL	ug/Kg	J	S
AROCLOR 1260	3.1		0.43	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	3.3	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S, L

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	2.4	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 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 1260	1.1	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***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	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 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	0.78	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.90	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.91	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.92	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.40	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.1	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	0.79	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.90	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 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	0.59	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 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	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.76	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	0.94	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.0	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.86	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.93	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***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(K)FLUORANTHENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.61	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 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
CHRYSENE	0.41	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-048-SA5A-SB-3.0-4.0** ***Collected:*** **2/7/2011 12:28:00** ***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	1.3	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-049-SA5A-SB-2.0-3.0** ***Collected:*** **2/7/2011 3:19:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.82	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-160-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 10:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.13**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.55	J	0.30	MDL	5.0	PQL	ug/Kg	U	B

Sample ID: **SL-161-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.63	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: **SL-162-SA5B-SB-4.0-5.0** ***Collected:*** **2/7/2011 11:54:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.06**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.13	J	0.07	MDL	4.8	PQL	ug/Kg	J	Z
m,p-Xylene	0.46	J	0.20	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.72	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

Sample ID: **SL-163-SA5B-SB-3.5-4.5** ***Collected:*** **2/7/2011 3:36:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1.14**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.75	J	0.29	MDL	4.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

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

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE077

Method Blank Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04108BB222105	2/11/2011 9:05:00 PM	TIN	1.50 mg/Kg	SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5

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-048-SA5A-SB-3.0-4.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-161-SA5B-SB-4.0-5.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	TIN	2.85 mg/Kg	2.85U mg/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04126BB221626A	2/22/2011 4:26:00 PM	COPPER	0.0662 mg/Kg	SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB66B211537A	2/8/2011 3:37:00 PM	METHYLENE CHLORIDE TOLUENE	0.44 ug/Kg 0.09 ug/Kg	SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5

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-048-SA5A-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-049-SA5A-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.82 ug/Kg	4.1U ug/Kg
SL-160-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.55 ug/Kg	5.0U ug/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_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-161-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	4.5U ug/Kg
SL-162-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	4.8U ug/Kg
SL-163-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.75 ug/Kg	4.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_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-048-SA5A-SB-3.0-4.0MS **SL-048-SA5A-SB-3.0-4.0MSD** (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	ANTIMONY	43	40	75.00-125.00	-	ANTIMONY	J (all detects) UJ (all non-detects)
SL-048-SA5A-SB-3.0-4.0MS **SL-048-SA5A-SB-3.0-4.0MSD** (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	BARIUM	126	133	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-048-SA5A-SB-3.0-4.0MS	ALUMINUM	1344	1349	75.00-125.00	-	ALUMINUM	J(all detects) Al, Ca, Fe, Mg, Mn, Ti No Qual, >4x
SL-048-SA5A-SB-3.0-4.0MSD	CALCIUM	203	162	75.00-125.00	-	CALCIUM	
(SL-048-SA5A-SB-3.0-4.0	IRON	784	458	75.00-125.00	-	IRON	
SL -049-SA5A-SB-2.0-3.0	MAGNESIUM	351	177	75.00-125.00	-	MAGNESIUM	
SL -160-SA5B-SB-4.0-5.0	MANGANESE	174	-	75.00-125.00	-	MANGANESE	
SL -161-SA5B-SB-4.0-5.0	PHOSPHORUS	139	-	75.00-125.00	-	PHOSPHORUS	
SL -162-SA5B-SB-4.0-5.0	POTASSIUM	137	-	75.00-125.00	-	POTASSIUM	
SL -163-SA5B-SB-3.5-4.5)	TITANIUM	396	303	75.00-125.00	-	TITANIUM	

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-048-SA5A-SB-3.0-4.0MS (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	FLUORIDE	54	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SB-3.0-4.0DUP (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	FLUORIDE	200	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SB-3.0-4.0DUP (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	Zirconium	21	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-048-SA5A-SB-3.0-4.0DUP (SL-048-SA5A-SB-3.0-4.0 SL -049-SA5A-SB-2.0-3.0 SL -160-SA5B-SB-4.0-5.0 SL -161-SA5B-SB-4.0-5.0 SL -162-SA5B-SB-4.0-5.0 SL -163-SA5B-SB-3.5-4.5)	BARIUM	21	20.00	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_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
P9LALCSQ260051 (SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5)	PHENOL	113	-	58.00-112.00	-	PHENOL	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10480AY241845A (SL-048-SA5A-SB-3.0-4.0 SL-049-SA5A-SB-2.0-3.0 SL-160-SA5B-SB-4.0-5.0 SL-161-SA5B-SB-4.0-5.0 SL-162-SA5B-SB-4.0-5.0 SL-163-SA5B-SB-3.5-4.5)	Aroclor 5442	-	63	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-160-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	137	45.00-120.00	All Target Analytes	J (all detects)
SL-161-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	123	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	SODIUM	J	102	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.8	PQL	mg/Kg	
	Zirconium	J	2.09	5.38	PQL	mg/Kg	
SL-049-SA5A-SB-2.0-3.0	SODIUM	J	68.3	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.44	11.0	PQL	mg/Kg	
	Zirconium	J	1.72	5.52	PQL	mg/Kg	
SL-160-SA5B-SB-4.0-5.0	TIN	J	2.45	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.18	5.41	PQL	mg/Kg	
SL-161-SA5B-SB-4.0-5.0	TIN	J	2.70	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.64	5.42	PQL	mg/Kg	
SL-162-SA5B-SB-4.0-5.0	TIN	J	2.85	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.96	5.47	PQL	mg/Kg	
SL-163-SA5B-SB-3.5-4.5	TIN	J	2.83	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.42	5.28	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	ANTIMONY	J	0.147	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0580	0.110	PQL	mg/Kg	
	SELENIUM	J	0.146	0.439	PQL	mg/Kg	
	SILVER	J	0.0191	0.110	PQL	mg/Kg	
SL-049-SA5A-SB-2.0-3.0	ANTIMONY	J	0.128	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.442	PQL	mg/Kg	
	SILVER	J	0.0343	0.110	PQL	mg/Kg	
SL-160-SA5B-SB-4.0-5.0	ANTIMONY	J	0.126	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0841	0.437	PQL	mg/Kg	
SL-161-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0919	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.105	0.106	PQL	mg/Kg	
	SELENIUM	J	0.0823	0.425	PQL	mg/Kg	
SL-162-SA5B-SB-4.0-5.0	ANTIMONY	J	0.121	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0529	0.434	PQL	mg/Kg	
SL-163-SA5B-SB-3.5-4.5	ANTIMONY	J	0.128	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.122	0.414	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-162-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-162-SA5B-SB-4.0-5.0	MERCURY	J	0.0122	0.108	PQL	mg/Kg	J (all detects)
SL-163-SA5B-SB-3.5-4.5	MERCURY	J	0.0058	0.105	PQL	mg/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-160-SA5B-SB-4.0-5.0	Aroclor 5460	J	1.2	3.6	PQL	ug/Kg	J (all detects)
SL-161-SA5B-SB-4.0-5.0	Aroclor 5460	J	3.3	3.7	PQL	ug/Kg	J (all detects)
SL-162-SA5B-SB-4.0-5.0	Aroclor 5460	J	2.4	3.7	PQL	ug/Kg	J (all detects)
SL-163-SA5B-SB-3.5-4.5	AROCLOR 1260 Aroclor 5460	J J	1.1 1.3	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.3	4.0	PQL	ug/Kg	J (all detects)
SL-049-SA5A-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.82	4.1	PQL	ug/Kg	J (all detects)
SL-160-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.55	5.0	PQL	ug/Kg	J (all detects)
SL-161-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.63	4.5	PQL	ug/Kg	J (all detects)
SL-162-SA5B-SB-4.0-5.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.13 0.46 0.72	4.8 4.8 4.8	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-163-SA5B-SB-3.5-4.5	METHYLENE CHLORIDE	J	0.75	4.9	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-048-SA5A-SB-3.0-4.0	NAPHTHALENE	J	0.94	1.8	PQL	ug/Kg	J (all detects)
SL-049-SA5A-SB-2.0-3.0	BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE CHRYSENE INDENO(1,2,3-CD)PYRENE NAPHTHALENE	J J J J J	0.78 1.1 0.90 0.91 0.92	1.9 1.9 1.9 1.9 1.9	PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE077 **Laboratory: LL**

EDD Filename: DE077_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-160-SA5B-SB-4.0-5.0	ACENAPHTHYLENE	J	0.40	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	FLUORENE	J	0.79	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	
	PYRENE	J	1.5	1.8	PQL	ug/Kg	
SL-161-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.59	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.88	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.76	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	0.94	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.0	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.86	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.93	1.8	PQL	ug/Kg	
	PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-162-SA5B-SB-4.0-5.0	BENZO(K)FLUORANTHENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.61	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-163-SA5B-SB-3.5-4.5	CHRYSENE	J	0.41	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.83	1.8	PQL	ug/Kg	

LDC #: 25764A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE077 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn 75%)
VII.	Duplicate Sample Analysis	N	D, R (25 < 5xRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Cr: 11%, Cu: 16%, Ni: 21% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-048-SA5A-SB-3.0-4.0	11		21		31	
2	SL-049-SA5A-SB-2.0-3.0	12		22		32	
3	SL-160-SA5B-SB-4.0-5.0	13		23		33	
4	SL-161-SA5B-SB-4.0-5.0	14		24		34	
5	SL-162-SA5B-SB-4.0-5.0	15		25		35	
6	SL-163-SA5B-SB-3.5-4.5	16		26		36	
7	(x1) MS	17		27		37	
8	↓ MSD	18		28		38	
9	↓ DUP	19		29		39	
10		20		30		40	

Notes:

LDC #: 25764A4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CB
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg
Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4	6						
Zr			5.8	2.9	2.1	1.7	2.2	2.6	2.4						

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.

SAMPLE DELIVERY GROUP

DE078

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-Feb-2011	TB-020811	6201164	TB	5030B	8015M	III
08-Feb-2011	TB-020811	6201164	TB	5030B	8260B	III
08-Feb-2011	TB-020811	6201164	TB	5030B	8260B SIM	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	3050B	6010B	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	3050B	6020	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	3060A	7199	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	3550B	8082	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	3550B	8270C	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	3550B	8270C SIM	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	5035	8260B	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	5035	8260B SIM	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	Gen Prep	9045M	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	METHOD	300.0	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	METHOD	314.0	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0	6201156	N	METHOD	7471A	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0MSD	P201156M261747	MSD	3550B	8270C SIM	III
08-Feb-2011	SL-164-SA5B-SB-4.0-5.0MS	P201156R261715	MS	3550B	8270C SIM	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3050B	6010B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3050B	6020	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3060A	7199	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3546	1625C	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3550B	8015B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3550B	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3550B	8082	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	3550B	8270C	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	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
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	5035	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	5035	8260B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	5035	8260B SIM	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	8330	8330A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	Gen Prep	9045M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	300.0	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	314.0	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	7471A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	8015B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	8315A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0	6201155	N	METHOD	9012B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0DUP	P201155D271633A	DUP	METHOD	314.0	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0DUP	P201155D271750A	DUP	METHOD	9012B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M240757A	MSD	8330	8330A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M242014A	MSD	METHOD	8315A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M260848	MSD	3550B	8270C	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M262306	MSD	3546	1625C	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M320346A	MSD	3550B	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M321434A	MSD	METHOD	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M321941A	MSD	METHOD	8015B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MSD	P201155M322034A	MSD	3550B	8015B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R240550A	MS	8330	8330A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R242004A	MS	METHOD	8315A	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R260821	MS	3550B	8270C	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R262250	MS	3546	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
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R271657A	MS	METHOD	314.0	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R271751A	MS	METHOD	9012B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R320321A	MS	3550B	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R321417A	MS	METHOD	8015M	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R321926A	MS	METHOD	8015B	III
08-Feb-2011	SL-168-SA5B-SB-4.0-5.0MS	P201155R321949A	MS	3550B	8015B	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3050B	6010B	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3050B	6020	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3060A	7199	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3546	1625C	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8015B	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8015M	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8081A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8082	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8151A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8270C	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	3550B	8270C SIM	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	8330	8330A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	Gen Prep	9045M	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	METHOD	300.0	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	METHOD	314.0	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	METHOD	7471A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	METHOD	8015B	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	METHOD	8015M	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	N	METHOD	8315A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5	6201161	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
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5DUP	P201161D271133A	DUP	METHOD	300.0	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5MSD	P201161M241525A	MSD	3550B	8151A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5MS	P201161R241458A	MS	3550B	8151A	III
08-Feb-2011	SL-316-SA5B-SS-0.0-0.5MS	P201161R271147A	MS	METHOD	300.0	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3050B	6010B	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3050B	6020	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3060A	7199	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3546	1625C	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3550B	8015B	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3550B	8015M	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3550B	8082	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3550B	8270C	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	3550B	8270C SIM	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	5035	8015M	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	5035	8260B	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	5035	8260B SIM	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	8330	8330A	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	Gen Prep	9045M	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	300.0	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	314.0	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	7471A	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	8015B	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	8015M	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	8315A	III
08-Feb-2011	SL-313-SA5B-SB-4.0-5.0	6201157	N	METHOD	9012B	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	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
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3050B	6020	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3060A	7199	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3546	1625C	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3550B	8015B	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3550B	8015M	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3550B	8082	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3550B	8270C	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	3550B	8270C SIM	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	5035	8015M	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	5035	8260B	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	5035	8260B SIM	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	8330	8330A	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	Gen Prep	9045M	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	300.0	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	314.0	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	7471A	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	8015B	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	8015M	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	8315A	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10	6201158	N	METHOD	9012B	III
08-Feb-2011	SL-313-SA5B-SB-9.0-10DUP	P201158D291330B	DUP	Gen Prep	9045M	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3050B	6010B	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3050B	6020	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3060A	7199	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3550B	8081A	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	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
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3550B	8151A	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3550B	8270C	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	3550B	8270C SIM	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	Gen Prep	9045M	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	METHOD	300.0	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	METHOD	314.0	III
08-Feb-2011	SL-328-SA5B-SS-0.0-0.5	6201163	N	METHOD	7471A	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3050B	6010B	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3050B	6020	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3060A	7199	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3550B	8081A	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3550B	8082	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3550B	8151A	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3550B	8270C	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	3550B	8270C SIM	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	Gen Prep	9045M	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	METHOD	300.0	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	METHOD	314.0	III
08-Feb-2011	SL-327-SA5B-SS-0.0-0.5	6201162	N	METHOD	7471A	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3050B	6010B	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3050B	6020	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3060A	7199	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3546	1625C	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3550B	8015B	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3550B	8015M	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	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
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3550B	8270C	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	3550B	8270C SIM	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	5035	8015M	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	5035	8260B	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	5035	8260B SIM	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	8330	8330A	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	Gen Prep	9045M	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	300.0	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	314.0	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	6850	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	7471A	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	8015B	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	8015M	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	8315A	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0	6201159	N	METHOD	9012B	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0DUP	P201159D271633B	DUP	METHOD	300.0	III
08-Feb-2011	SL-314-SA5B-SB-4.0-5.0MS	P201159R271647B	MS	METHOD	300.0	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3050B	6010B	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3050B	6020	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3060A	7199	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3546	1625C	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8015B	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8015M	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8081A	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8082	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8151A	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
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8270C	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	3550B	8270C SIM	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	8330	8330A	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	Gen Prep	9045M	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	300.0	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	314.0	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	6850	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	7471A	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	8015B	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	8015M	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	8315A	III
08-Feb-2011	SL-315-SA5B-SS-0.0-0.5	6201160	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-313-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 2:24:00 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	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-313-SA5B-SB-9.0-10 *Collected:* 2/8/2011 2:33:00 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	0.99	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-314-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 4:10:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.1		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-315-SA5B-SS-0.0-0.5 *Collected:* 2/8/2011 4:18:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-327-SA5B-SS-0.0-0.5 *Collected:* 2/8/2011 3:39:00 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		0.83	MDL	1.0	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-164-SA5B-SB-4.0-5.0 *Collected:* 2/8/2011 10:08:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHOSPHORUS	347		0.593	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2870		19.1	MDL	52.9	PQL	mg/Kg	J	Q
SODIUM	78.1	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	2.67	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.20	J	0.889	MDL	5.29	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-168-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.13	J	0.994	MDL	5.59	PQL	mg/Kg	J	Z
PHOSPHORUS	187		0.626	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2260		20.1	MDL	55.9	PQL	mg/Kg	J	Q
TIN	2.63	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.52	J	0.939	MDL	5.59	PQL	mg/Kg	U	B

Sample ID: **SL-313-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 2:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.80	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
PHOSPHORUS	742		0.609	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2700		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.06	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.49	J	0.914	MDL	5.44	PQL	mg/Kg	U	B

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.82	J	0.975	MDL	5.48	PQL	mg/Kg	J	Z
PHOSPHORUS	742		0.613	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2860		19.7	MDL	54.8	PQL	mg/Kg	J	Q
TIN	2.66	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.94	J	0.920	MDL	5.48	PQL	mg/Kg	U	B

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.92	J	0.966	MDL	5.43	PQL	mg/Kg	J	Z
PHOSPHORUS	375		0.608	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2890		19.5	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.48	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.02	J	0.912	MDL	5.43	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.50	J	0.943	MDL	5.30	PQL	mg/Kg	J	Z
PHOSPHORUS	487		0.593	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2630		19.1	MDL	53.0	PQL	mg/Kg	J	Q
TIN	2.29	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.890	MDL	5.30	PQL	mg/Kg	U	B

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.91	J	0.906	MDL	5.09	PQL	mg/Kg	J	Z
PHOSPHORUS	432		0.570	MDL	10.2	PQL	mg/Kg	J	Q
POTASSIUM	2470		18.3	MDL	50.9	PQL	mg/Kg	J	Q
TIN	2.39	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.38	J	0.855	MDL	5.09	PQL	mg/Kg	U	B

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.33	J	0.917	MDL	5.15	PQL	mg/Kg	J	Z
PHOSPHORUS	527		0.577	MDL	10.3	PQL	mg/Kg	J	Q
POTASSIUM	2650		18.5	MDL	51.5	PQL	mg/Kg	J	Q
TIN	2.17	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.82	J	0.865	MDL	5.15	PQL	mg/Kg	U	B

Sample ID: **SL-328-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:09:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.44	J	0.916	MDL	5.15	PQL	mg/Kg	J	Z
PHOSPHORUS	441		0.576	MDL	10.3	PQL	mg/Kg	J	Q
POTASSIUM	2730		18.5	MDL	51.5	PQL	mg/Kg	J	Q
TIN	2.29	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.865	MDL	5.15	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-164-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 10:08:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0952	J	0.0623	MDL	0.208	PQL	mg/Kg	J	Z, Q
COPPER	8.64		0.0685	MDL	0.415	PQL	mg/Kg	J	A
NICKEL	11.2		0.104	MDL	0.415	PQL	mg/Kg	J	A

Sample ID: SL-164-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 10:08:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-164-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 10:08:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	18.9		0.125	MDL	0.415	PQL	mg/Kg	J	A

Sample ID: SL-168-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 11:49:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.129	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q
COPPER	7.94		0.0730	MDL	0.443	PQL	mg/Kg	J	A
NICKEL	12.8		0.111	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: SL-168-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 11:49:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.151	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-168-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 11:49:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	21.3		0.133	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: SL-313-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 2:24:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.237		0.0653	MDL	0.218	PQL	mg/Kg	J	Q
COPPER	14.9		0.0718	MDL	0.435	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-313-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 2:24:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	12.0		0.109	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: **SL-313-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 2:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	22.1		0.131	MDL	0.435	PQL	mg/Kg	J	A
SILVER	0.0237	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.110	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q
COPPER	7.81		0.0730	MDL	0.443	PQL	mg/Kg	J	A
NICKEL	8.85		0.111	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0981	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	15.5		0.133	MDL	0.443	PQL	mg/Kg	J	A
SILVER	0.0255	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0833	J	0.0639	MDL	0.213	PQL	mg/Kg	J	Z, Q
COPPER	8.51		0.0703	MDL	0.426	PQL	mg/Kg	J	A
NICKEL	8.00		0.106	MDL	0.426	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0838	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	13.1		0.128	MDL	0.426	PQL	mg/Kg	J	A
SILVER	0.0136	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.277		0.0617	MDL	0.206	PQL	mg/Kg	J	Q
COPPER	8.43		0.0679	MDL	0.411	PQL	mg/Kg	J	A
NICKEL	9.64		0.103	MDL	0.411	PQL	mg/Kg	J	A

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0411	MDL	0.411	PQL	mg/Kg	J	Z

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	16.0		0.123	MDL	0.411	PQL	mg/Kg	J	A
SILVER	0.0447	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0605	MDL	0.202	PQL	mg/Kg	J	Z, Q
COPPER	8.57		0.0665	MDL	0.403	PQL	mg/Kg	J	A
NICKEL	9.20		0.101	MDL	0.403	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.165	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	16.6		0.121	MDL	0.403	PQL	mg/Kg	J	A
SILVER	0.0245	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0692	J	0.0600	MDL	0.200	PQL	mg/Kg	J	Z, Q
COPPER	9.54		0.0660	MDL	0.400	PQL	mg/Kg	J	A
NICKEL	7.56		0.100	MDL	0.400	PQL	mg/Kg	J	A

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.115	J	0.0400	MDL	0.400	PQL	mg/Kg	J	Z

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	13.4		0.120	MDL	0.400	PQL	mg/Kg	J	A
SILVER	0.0249	J	0.0120	MDL	0.100	PQL	mg/Kg	J	Z

Sample ID: **SL-328-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:09:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.167	J	0.0606	MDL	0.202	PQL	mg/Kg	J	Z, Q
COPPER	7.46		0.0666	MDL	0.404	PQL	mg/Kg	J	A
NICKEL	8.48		0.101	MDL	0.404	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-328-SA5B-SS-0.0-0.5 ***Collected:*** 2/8/2011 3:09:00 PM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0404	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SL-328-SA5B-SS-0.0-0.5 ***Collected:*** 2/8/2011 3:09:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	16.0		0.121	MDL	0.404	PQL	mg/Kg	J	A
SILVER	0.0296	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-164-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 10:08:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-168-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 11:49:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-313-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 2:24:00 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	0.22	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-313-SA5B-SB-9.0-10 ***Collected:*** 2/8/2011 2:33:00 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	0.29	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: **SL-164-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 10:08:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0256	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-168-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0043	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: **SL-313-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 2:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0197	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0060	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0126	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0056	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **SL-168-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 11:49:00** ***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)	0.52	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C21-C30)	0.78	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.45	U	0.45	MDL	1.3	PQL	mg/Kg	UJ	Q

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.63	J	0.42	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 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
4,4'-DDT	0.19	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z
Chlordane	1.2	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 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
4,4'-DDT	0.12	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z
Chlordane	1.5	J	0.84	MDL	3.6	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-164-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 10:08:00** ***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	13		0.42	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	19		1.1	MDL	3.6	PQL	ug/Kg	J	S, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-168-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 11:49:00** ***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	0.60	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-313-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 2:24:00 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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

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

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 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	0.93	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 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	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z, L

Sample ID: **SL-328-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:09:00 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 1260	0.90	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.085	U	0.085	MDL	0.18	PQL	ug/Kg	UJ	S
2,4,5-TP (Silvex)	0.078	U	0.078	MDL	0.18	PQL	ug/Kg	UJ	S
2,4-D	1.2	U	1.2	MDL	3.7	PQL	ug/Kg	UJ	S
2,4-DB	0.65	U	0.65	MDL	1.8	PQL	ug/Kg	UJ	S
DALAPON	4.6	U	4.6	MDL	9.4	PQL	ug/Kg	UJ	S
DICAMBA	0.42	U	0.42	MDL	1.2	PQL	ug/Kg	UJ	S
DICHLOROPROP	0.83	U	0.83	MDL	1.8	PQL	ug/Kg	UJ	S
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	UJ	S
MCPA	79	U	79	MDL	260	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	78	U	78	MDL	260	PQL	ug/Kg	UJ	S

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-164-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 10:08:00** ***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	25	J	18	MDL	360	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	90	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-168-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 11:49:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 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	130	J	18	MDL	370	PQL	ug/Kg	J	Z
PYRENE	28	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 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	59	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 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	27	J	17	MDL	350	PQL	ug/Kg	J	Z
Dimethylphthalate	38	J	17	MDL	170	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-328-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:09:00 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	32	J	17	MDL	350	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: **SL-164-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 10:08:00** ***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	0.44	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Dimethylphthalate	16	J	6.5	MDL	19	PQL	ug/Kg	J	Z, Q
Di-n-butylphthalate	9.3	J	6.5	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.1	J	6.5	MDL	19	PQL	ug/Kg	U	B
NAPHTHALENE	0.86	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-168-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 11:49:00** ***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(K)FLUORANTHENE	1.7	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	6.7	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.52	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.5	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-313-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 2:24:00 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	1.7	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	6.7	J	6.7	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.82	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.4	J	6.7	MDL	20	PQL	ug/Kg	U	B
FLUORENE	0.84	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.8	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.3	J	6.7	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.4	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.7	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	23		6.7	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.2	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 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
ANTHRACENE	1.4	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.1	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.8	J	6.6	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-315-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 4:18:00 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	0.53	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.84	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.9	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.7	J	6.4	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 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	0.97	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-316-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 2:02:00 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(K)FLUORANTHENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.0	J	6.3	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.5	J	6.3	MDL	19	PQL	ug/Kg	U	B
FLUORANTHENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-327-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:39:00 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	0.97	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.0	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.7	J	6.2	MDL	19	PQL	ug/Kg	U	B
FLUORANTHENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-328-SA5B-SS-0.0-0.5** ***Collected:*** **2/8/2011 3:09:00 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	0.83	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.77	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.80	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.86	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.8	J	6.2	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.9	J	6.2	MDL	19	PQL	ug/Kg	U	B
FLUORANTHENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PHENANTHRENE	0.75	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-168-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 11:49:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitroglycerin	890	U	890	MDL	2700	PQL	ug/Kg	UJ	Q

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-164-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 10:08:00 ***Analysis Type:*** RES ***Dilution:*** 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.56	U	0.56	MDL	5.6	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.84	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.09	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-168-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 11:49:00 ***Analysis Type:*** RES ***Dilution:*** 0.88

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.49	U	0.49	MDL	4.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.65	J	0.24	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-313-SA5B-SB-4.0-5.0 ***Collected:*** 2/8/2011 2:24:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.95

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.53	U	0.53	MDL	5.3	PQL	ug/Kg	UJ	L
BENZENE	0.20	J	0.11	MDL	4.2	PQL	ug/Kg	J	Z
ETHYLBENZENE	0.30	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
ISOPROPYLBENZENE	0.08	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.26	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.75	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-313-SA5B-SB-9.0-10 ***Collected:*** 2/8/2011 2:33:00 PM ***Analysis Type:*** RES ***Dilution:*** 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.55	U	0.55	MDL	5.5	PQL	ug/Kg	UJ	L
ACETONE	17		7.4	MDL	8.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-313-SA5B-SB-9.0-10** ***Collected:*** **2/8/2011 2:33:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.99**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.11	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	0.34	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.3	J	0.27	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-314-SA5B-SB-4.0-5.0** ***Collected:*** **2/8/2011 4:10:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.52	U	0.52	MDL	5.2	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.09	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.30	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	4.5		0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: PrepDE078_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE078

Method Blank Outlier Report

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04108BB222105	2/11/2011 9:05:00 PM	TIN	1.50 mg/Kg	SL-164-SA5B-SB-4.0-5.0 SL-168-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-9.0-10 SL-314-SA5B-SB-4.0-5.0 SL-315-SA5B-SS-0.0-0.5 SL-316-SA5B-SS-0.0-0.5 SL-327-SA5B-SS-0.0-0.5 SL-328-SA5B-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-164-SA5B-SB-4.0-5.0(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-168-SA5B-SB-4.0-5.0(RES)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	TIN	2.06 mg/Kg	2.06U mg/Kg
SL-313-SA5B-SB-9.0-10(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-315-SA5B-SS-0.0-0.5(RES)	TIN	2.29 mg/Kg	2.29U mg/Kg
SL-316-SA5B-SS-0.0-0.5(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-327-SA5B-SS-0.0-0.5(RES)	TIN	2.17 mg/Kg	2.17U mg/Kg
SL-328-SA5B-SS-0.0-0.5(RES)	TIN	2.29 mg/Kg	2.29U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04126BB221626A	2/22/2011 4:26:00 PM	COPPER	0.0662 mg/Kg	SL-164-SA5B-SB-4.0-5.0 SL-168-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-9.0-10 SL-314-SA5B-SB-4.0-5.0 SL-315-SA5B-SS-0.0-0.5 SL-316-SA5B-SS-0.0-0.5 SL-327-SA5B-SS-0.0-0.5 SL-328-SA5B-SS-0.0-0.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB68B211247A	2/11/2011 12:47:00 PM	ACETONE CHLOROFORM METHYLENE CHLORIDE TOLUENE	9.5 ug/Kg 0.23 ug/Kg 0.54 ug/Kg 0.11 ug/Kg	SL-164-SA5B-SB-4.0-5.0 SL-168-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-9.0-10 SL-314-SA5B-SB-4.0-5.0

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_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-164-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.84 ug/Kg	4.5U ug/Kg
SL-164-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.13 ug/Kg	4.5U ug/Kg
SL-168-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.65 ug/Kg	3.9U ug/Kg
SL-168-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.9U ug/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.75 ug/Kg	4.2U ug/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.13 ug/Kg	4.2U ug/Kg
SL-313-SA5B-SB-9.0-10(RES)	ACETONE	17 ug/Kg	17U ug/Kg
SL-313-SA5B-SB-9.0-10(RES)	METHYLENE CHLORIDE	2.3 ug/Kg	4.4U ug/Kg
SL-313-SA5B-SB-9.0-10(RES)	TOLUENE	0.12 ug/Kg	4.4U ug/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.5 ug/Kg	4.5U ug/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.2U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB04B261536	2/13/2011 3:36:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	8.3 ug/Kg 6.3 ug/Kg	SL-164-SA5B-SB-4.0-5.0 SL-168-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-4.0-5.0 SL-313-SA5B-SB-9.0-10 SL-314-SA5B-SB-4.0-5.0 SL-315-SA5B-SS-0.0-0.5 SL-316-SA5B-SS-0.0-0.5 SL-327-SA5B-SS-0.0-0.5 SL-328-SA5B-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-164-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	7.1 ug/Kg	19U ug/Kg
SL-168-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	20U ug/Kg
SL-168-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	7.5 ug/Kg	20U ug/Kg
SL-313-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	8.4 ug/Kg	20U ug/Kg
SL-313-SA5B-SB-9.0-10(RES)	Di-n-octylphthalate	23 ug/Kg	23U ug/Kg
SL-314-SA5B-SB-4.0-5.0(RES)	Di-n-octylphthalate	9.8 ug/Kg	20U ug/Kg
SL-315-SA5B-SS-0.0-0.5(RES)	Di-n-octylphthalate	6.7 ug/Kg	19U ug/Kg
SL-316-SA5B-SS-0.0-0.5(RES)	Di-n-octylphthalate	6.5 ug/Kg	19U ug/Kg
SL-327-SA5B-SS-0.0-0.5(RES)	Di-n-octylphthalate	6.7 ug/Kg	19U ug/Kg
SL-328-SA5B-SS-0.0-0.5(RES)	Di-n-octylphthalate	6.9 ug/Kg	19U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_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-168-SA5B-SB-4.0-5.0MS **SL-168-SA5B-SB-4.0-5.0MSD** (SL-168-SA5B-SB-4.0-5.0)	BENZIDINE	16	0	35.00-141.00	200 (30.00)	BENZIDINE	J (all detects) R (all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-164-SA5B-SB-4.0-5.0MS **SL-164-SA5B-SB-4.0-5.0MSD** (SL-164-SA5B-SB-4.0-5.0)	Butylbenzylphthalate	201	-	73.00-140.00	42 (30.00)	Butylbenzylphthalate	J(all detects)
SL-164-SA5B-SB-4.0-5.0MS (SL-164-SA5B-SB-4.0-5.0)	Dimethylphthalate	58	-	74.00-118.00	-	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-314-SA5B-SB-4.0-5.0MS (SL-314-SA5B-SB-4.0-5.0 SL-315-SA5B-SS-0.0-0.5 SL-327-SA5B-SS-0.0-0.5)	FLUORIDE	127	-	80.00-120.00	-	FLUORIDE	J(all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-168-SA5B-SB-4.0-5.0MS **SL-168-SA5B-SB-4.0-5.0MSD** (SL-168-SA5B-SB-4.0-5.0)	EFH (C8-C11)	19	20	49.00-123.00	-	EFH (C8-C11)	J(all detects) UJ(all non-detects)

Method: 6330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-168-SA5B-SB-4.0-5.0MS (SL-168-SA5B-SB-4.0-5.0)	Nitroglycerin	77	-	80.00-120.00	-	Nitroglycerin	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-316-SA5B-SS-0.0-0.5MSD (SL-316-SA5B-SS-0.0-0.5)	2,4,5-T	-	-	25.00-132.00	38 (35.00)	2,4,5-T	J(all detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_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
P10465AQ240300A	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	
(SL-168-SA5B-SB-4.0-5.0	2,6-DINITROTOLUENE	121	-	80.00-120.00	-	2,6-DINITROTOLUENE	
SL -313-SA5B-SB-4.0-5.0	2-AMINO-4,6-DINITROTOLUENE	123	-	80.00-120.00	-	2-AMINO-4,6-DINITROTOLUEN	
SL -313-SA5B-SB-9.0-10	NITROBENZENE	122	-	80.00-120.00	-	NITROBENZENE	J (all detects)
SL -314-SA5B-SB-4.0-5.0	PETN	126	-	80.00-120.00	-	PETN	
SL -315-SA5B-SS-0.0-0.5							
SL -316-SA5B-SS-0.0-0.5)							

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10480AY241845A	Aroclor 5442	-	63	75.00-125.00	-	Aroclor 5432, 5442, 5460	
(SL-164-SA5B-SB-4.0-5.0							
SL -168-SA5B-SB-4.0-5.0							
SL -313-SA5B-SB-4.0-5.0							
SL -313-SA5B-SB-9.0-10							J(all detects)
SL -314-SA5B-SB-4.0-5.0							UJ(all non-detects)
SL -315-SA5B-SS-0.0-0.5							
SL -316-SA5B-SS-0.0-0.5							
SL -327-SA5B-SS-0.0-0.5							
SL -328-SA5B-SS-0.0-0.5)							

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B68Y211421A	2-Chloro-1,1,1-trifluoroethane	-	75	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	
(SL-164-SA5B-SB-4.0-5.0							
SL -168-SA5B-SB-4.0-5.0							
SL -313-SA5B-SB-4.0-5.0							J(all detects)
SL -313-SA5B-SB-9.0-10							UJ(all non-detects)
SL -314-SA5B-SB-4.0-5.0)							

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-164-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	147	45.00-120.00	All Target Analytes	J (all detects)
SL-313-SA5B-SB-4.0-5.0	DECACHLOROBIPHENYL	138	45.00-120.00	All Target Analytes	J(all detects)

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-327-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	26	36.00-156.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-316-SA5B-SS-0.0-0.5	2-NITRO-M-XYLENE	142	65.00-135.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-313-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.7	PQL	mg/Kg	J (all detects)
SL-313-SA5B-SB-9.0-10	Nitrate-NO3	J	0.99	1.7	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	SODIUM	J	78.1	106	PQL	mg/Kg	
	TIN	J	2.67	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.20	5.29	PQL	mg/Kg	
SL-168-SA5B-SB-4.0-5.0	BORON	J	1.13	5.59	PQL	mg/Kg	
	TIN	J	2.63	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.52	5.59	PQL	mg/Kg	
SL-313-SA5B-SB-4.0-5.0	BORON	J	3.80	5.44	PQL	mg/Kg	
	TIN	J	2.06	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.49	5.44	PQL	mg/Kg	
SL-313-SA5B-SB-9.0-10	BORON	J	1.82	5.48	PQL	mg/Kg	
	TIN	J	2.66	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.94	5.48	PQL	mg/Kg	
SL-314-SA5B-SB-4.0-5.0	BORON	J	1.92	5.43	PQL	mg/Kg	
	TIN	J	2.48	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.02	5.43	PQL	mg/Kg	
SL-315-SA5B-SS-0.0-0.5	BORON	J	2.50	5.30	PQL	mg/Kg	
	TIN	J	2.29	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.33	5.30	PQL	mg/Kg	
SL-316-SA5B-SS-0.0-0.5	BORON	J	1.91	5.09	PQL	mg/Kg	
	TIN	J	2.39	10.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.38	5.09	PQL	mg/Kg	
SL-327-SA5B-SS-0.0-0.5	BORON	J	1.33	5.15	PQL	mg/Kg	
	TIN	J	2.17	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.82	5.15	PQL	mg/Kg	
SL-328-SA5B-SS-0.0-0.5	BORON	J	1.44	5.15	PQL	mg/Kg	
	TIN	J	2.29	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.15	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0952	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.415	PQL	mg/Kg	
SL-168-SA5B-SB-4.0-5.0	ANTIMONY	J	0.129	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.151	0.443	PQL	mg/Kg	
SL-313-SA5B-SB-4.0-5.0	SILVER	J	0.0237	0.109	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-313-SA5B-SB-9.0-10	ANTIMONY	J	0.110	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0981	0.443	PQL	mg/Kg	
	SILVER	J	0.0255	0.111	PQL	mg/Kg	
SL-314-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0833	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0838	0.426	PQL	mg/Kg	
	SILVER	J	0.0136	0.106	PQL	mg/Kg	
SL-315-SA5B-SS-0.0-0.5	SELENIUM	J	0.273	0.411	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0447	0.103	PQL	mg/Kg	
SL-316-SA5B-SS-0.0-0.5	ANTIMONY	J	0.123	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.165	0.403	PQL	mg/Kg	
	SILVER	J	0.0245	0.101	PQL	mg/Kg	
SL-327-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0692	0.200	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.115	0.400	PQL	mg/Kg	
	SILVER	J	0.0249	0.100	PQL	mg/Kg	
SL-328-SA5B-SS-0.0-0.5	ANTIMONY	J	0.167	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.127	0.404	PQL	mg/Kg	
	SILVER	J	0.0296	0.101	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-168-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-313-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.22	1.1	PQL	mg/Kg	J (all detects)
SL-313-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	MERCURY	J	0.0256	0.102	PQL	mg/Kg	J (all detects)
SL-168-SA5B-SB-4.0-5.0	MERCURY	J	0.0043	0.108	PQL	mg/Kg	J (all detects)
SL-313-SA5B-SB-4.0-5.0	MERCURY	J	0.0197	0.110	PQL	mg/Kg	J (all detects)
SL-313-SA5B-SB-9.0-10	MERCURY	J	0.0091	0.109	PQL	mg/Kg	J (all detects)
SL-314-SA5B-SB-4.0-5.0	MERCURY	J	0.0060	0.108	PQL	mg/Kg	J (all detects)
SL-315-SA5B-SS-0.0-0.5	MERCURY	J	0.0126	0.103	PQL	mg/Kg	J (all detects)
SL-316-SA5B-SS-0.0-0.5	MERCURY	J	0.0056	0.101	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-168-SA5B-SB-4.0-5.0	EFH (C15-C20) EFH (C21-C30)	J J	0.52 0.78	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-316-SA5B-SS-0.0-0.5	EFH (C15-C20)	J	0.63	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-315-SA5B-SS-0.0-0.5	4,4'-DDT Chlordane	J J	0.19 1.2	0.36 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-316-SA5B-SS-0.0-0.5	4,4'-DDT Chlordane	J J	0.12 1.5	0.36 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-168-SA5B-SB-4.0-5.0	AROCLOR 1260	J	0.60	1.9	PQL	ug/Kg	J (all detects)
SL-316-SA5B-SS-0.0-0.5	AROCLOR 1254	J	0.93	1.8	PQL	ug/Kg	J (all detects)
SL-327-SA5B-SS-0.0-0.5	Aroclor 5460	J	1.1	3.4	PQL	ug/Kg	J (all detects)
SL-328-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.90	1.8	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.84 0.13	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-168-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.65 0.09	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-313-SA5B-SB-4.0-5.0	BENZENE ETHYLBENZENE ISOPROPYLBENZENE m,p-Xylene METHYLENE CHLORIDE TOLUENE	J J J J J J	0.20 0.30 0.08 0.26 0.75 0.13	4.2 4.2 4.2 4.2 4.2 4.2	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-313-SA5B-SB-9.0-10	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE TOLUENE	J J J J	0.11 0.34 2.3 0.12	4.4 4.4 4.4 4.4	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.09	4.2	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.30	4.2	PQL	ug/Kg	
	TOLUENE	J	0.11	4.2	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	90	180	PQL	ug/Kg	
	PHENANTHRENE	J	24	180	PQL	ug/Kg	
SL-314-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	130	370	PQL	ug/Kg	J (all detects)
	PYRENE	J	28	180	PQL	ug/Kg	
SL-316-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	59	350	PQL	ug/Kg	J (all detects)
SL-327-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	350	PQL	ug/Kg	J (all detects)
	Dimethylphthalate	J	38	170	PQL	ug/Kg	
SL-328-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	350	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-164-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.44	1.8	PQL	ug/Kg	J (all detects)
	Dimethylphthalate	J	16	19	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.3	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.1	19	PQL	ug/Kg	
	NAPHTHALENE	J	0.86	1.8	PQL	ug/Kg	
SL-168-SA5B-SB-4.0-5.0	BENZO(K)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.52	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.5	20	PQL	ug/Kg	
SL-313-SA5B-SB-4.0-5.0	ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	6.7	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.82	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.4	20	PQL	ug/Kg	
	FLUORENE	J	0.84	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
SL-313-SA5B-SB-9.0-10	1-METHYLNAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.8	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.3	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.7	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE078 **Laboratory: LL**

EDD Filename: DE078_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SB-4.0-5.0	ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.1	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.8	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.8	PQL	ug/Kg	
SL-315-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.53	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.84	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.9	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.7	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
SL-316-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.5	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	1.7	PQL	ug/Kg	
	PYRENE	J	1.5	1.7	PQL	ug/Kg	
SL-327-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.97	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.0	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.0	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.7	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.7	PQL	ug/Kg	
SL-328-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.83	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.77	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.80	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.86	1.7	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.7	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.8	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.9	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.75	1.7	PQL	ug/Kg	
	PYRENE	J	1.2	1.7	PQL	ug/Kg	

LDC #: 25764B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/4

SDG #: DE0778 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: AR

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	~~SW~~ N	~~Client specified~~ See DZ077
VII.	Duplicate Sample Analysis	N	↓ ↓
VIII.	Laboratory Control Samples (LCS)	~~A~~	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	~~N~~	~~Not performed~~ See DZ077
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-168-SA5B-SB-4.0-5.0	11		21		31	
2	SL-164-SA5B-SB-4.0-5.0	12		22		32	
3	SL-313-SA5B-SB-4.0-5.0	13		23		33	
4	SL-313-SA5B-SB-9.0-10.0	14		24		34	
5	SL-314-SA5B-SB-4.0-5.0	15		25		35	
6	SL-315-SA5B-SB-0.0-0.5	16		26		36	
7	SL-316-SA5B-SB-0.0-0.5	17		27		37	
8	SL-327-SA5B-SB-0.0-0.5	18		28		38	
9	SL-328-SA5B-SB-0.0-0.5	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25764B4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1-8 Reason Code: B

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			
Zr			5.8	2.9	2.5	2.2	2.5	1.9	2.0	2.3	2.4	1.8			

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 9 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	9										
Zr			6.4	3.2	2.5										

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.

SAMPLE DELIVERY GROUP

DE079

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-Feb-2011	TB-020911	6202516	TB	5030B	8015M	IV
09-Feb-2011	TB-020911	6202516	TB	5030B	8260B	IV
09-Feb-2011	TB-020911	6202516	TB	5030B	8260B SIM	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3050B	6010B	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3060A	7199	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3546	1625C	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8015B	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8015M	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8081A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8082	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8151A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8270C	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	3550B	8270C SIM	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	8330	8330A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	Gen Prep	9045M	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	300.0	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	314.0	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	6850	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	7471A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	8015B	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	8015M	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	8315A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5	6202505	N	METHOD	9012B	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D221035	DUP	METHOD	7471A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D221650	DUP	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
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D221922A	DUP	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D221922B	DUP	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D221922C	DUP	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D221922D	DUP	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D272122B	DUP	METHOD	314.0	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5DUP	P202505D291300A	DUP	Gen Prep	9045M	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M221037	MSD	METHOD	7471A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M221658	MSD	3050B	6010B	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M221929A	MSD	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M221929B	MSD	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M221929C	MSD	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M221929D	MSD	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M242143A	MSD	3550B	8082	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M261328	MSD	3550B	8270C	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MSD	P202505M261401	MSD	3546	1625C	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R221036	MS	METHOD	7471A	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R221654	MS	3050B	6010B	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R221926A	MS	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R221926B	MS	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R221926C	MS	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R221926D	MS	3050B	6020	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R242125A	MS	3550B	8082	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R261259	MS	3550B	8270C	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R261343	MS	3546	1625C	IV
09-Feb-2011	SL-314-SA5B-SS-0.0-0.5MS	P202505R272146B	MS	METHOD	314.0	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	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
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3050B	6020	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3060A	7199	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3546	1625C	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3550B	8015B	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3550B	8015M	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3550B	8082	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3550B	8270C	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	3550B	8270C SIM	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	5035	8015M	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	5035	8260B	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	5035	8260B SIM	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	8330	8330A	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	Gen Prep	9045M	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	300.0	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	314.0	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	7471A	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	8015B	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	8015M	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	8315A	IV
09-Feb-2011	SL-328-SA5B-SB-3.5-4.5	6202515	N	METHOD	9012B	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3050B	6010B	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3050B	6020	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3060A	7199	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3550B	8081A	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3550B	8082	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3550B	8151A	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
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3550B	8270C	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	3550B	8270C SIM	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	Gen Prep	9045M	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	METHOD	300.0	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	METHOD	314.0	IV
09-Feb-2011	SL-319-SA5B-SS-0.0-0.5	6202509	N	METHOD	7471A	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3050B	6010B	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3050B	6020	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3060A	7199	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3550B	8081A	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3550B	8082	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3550B	8151A	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3550B	8270C	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	3550B	8270C SIM	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	Gen Prep	9045M	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	METHOD	300.0	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	METHOD	314.0	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5	6202514	N	METHOD	7471A	IV
09-Feb-2011	SL-326-SA5B-SS-0.0-0.5DUP	P202514D291300B	DUP	Gen Prep	9045M	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3050B	6010B	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3050B	6020	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3060A	7199	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3546	1625C	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3550B	8015B	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3550B	8015M	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	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
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3550B	8270C	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	3550B	8270C SIM	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	5035	8015M	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	5035	8260B	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	5035	8260B SIM	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	8330	8330A	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	Gen Prep	9045M	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	300.0	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	314.0	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	7471A	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	8015B	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	8015M	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	8315A	IV
09-Feb-2011	SL-316-SA5B-SB-4.5-5.5	6202506	N	METHOD	9012B	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3050B	6010B	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3050B	6020	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3060A	7199	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3550B	8081A	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3550B	8082	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3550B	8151A	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3550B	8270C	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	3550B	8270C SIM	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	Gen Prep	9045M	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	METHOD	300.0	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	METHOD	314.0	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5	6202512	N	METHOD	7471A	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
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5DUP	P202512D271813A	DUP	3060A	7199	IV
09-Feb-2011	SL-324-SA5B-SS-0.0-0.5MS	P202512R271729A	MS	3060A	7199	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3050B	6010B	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3050B	6020	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3060A	7199	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3550B	8081A	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3550B	8082	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3550B	8151A	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3550B	8270C	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	3550B	8270C SIM	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	Gen Prep	9045M	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	METHOD	300.0	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	METHOD	314.0	IV
09-Feb-2011	SL-323-SA5B-SS-0.0-0.5	6202511	N	METHOD	7471A	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: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	0.95	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-314-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 9:08:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.18	J	0.962	MDL	5.41	PQL	mg/Kg	J	Z
CALCIUM	7740		6.63	MDL	21.6	PQL	mg/Kg	J	E
PHOSPHORUS	789		0.605	MDL	10.8	PQL	mg/Kg	J	E
POTASSIUM	2160		19.5	MDL	54.1	PQL	mg/Kg	J	Q
TIN	2.33	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.72	J	0.908	MDL	5.41	PQL	mg/Kg	J	Z

Sample ID: **SL-316-SA5B-SB-4.5-5.5** ***Collected:*** **2/9/2011 11:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.922	U	0.922	MDL	5.18	PQL	mg/Kg	UJ	I
CALCIUM	2660		6.35	MDL	20.7	PQL	mg/Kg	J	E
PHOSPHORUS	320		0.580	MDL	10.4	PQL	mg/Kg	J	E
POTASSIUM	3000		18.7	MDL	51.8	PQL	mg/Kg	J	Q
TIN	2.63	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.49	J	0.870	MDL	5.18	PQL	mg/Kg	UJ	I, B

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 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
BORON	2.23	J	0.923	MDL	5.19	PQL	mg/Kg	J	Z
CALCIUM	5710		6.36	MDL	20.7	PQL	mg/Kg	J	E
PHOSPHORUS	570		0.581	MDL	10.4	PQL	mg/Kg	J	E
POTASSIUM	2560		18.7	MDL	51.9	PQL	mg/Kg	J	Q
TIN	2.21	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.67	J	0.871	MDL	5.19	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-323-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 3:14:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	11.0		0.914	MDL	5.13	PQL	mg/Kg	J	I
CALCIUM	8220		6.29	MDL	20.5	PQL	mg/Kg	J	E
PHOSPHORUS	502		0.575	MDL	10.3	PQL	mg/Kg	J	E
POTASSIUM	2900		18.5	MDL	51.3	PQL	mg/Kg	J	Q
TIN	2.48	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	2.36	J	0.862	MDL	5.13	PQL	mg/Kg	UJ	I, B

Sample ID: SL-324-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 2:24:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.03	J	0.921	MDL	5.18	PQL	mg/Kg	J	Z
CALCIUM	8840		6.34	MDL	20.7	PQL	mg/Kg	J	E
PHOSPHORUS	549		0.580	MDL	10.4	PQL	mg/Kg	J	E
POTASSIUM	1900		18.6	MDL	51.8	PQL	mg/Kg	J	Q
TIN	2.02	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	4.02	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-326-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 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
CALCIUM	5840		6.35	MDL	20.7	PQL	mg/Kg	J	E
PHOSPHORUS	468		0.580	MDL	10.4	PQL	mg/Kg	J	E
POTASSIUM	2580		18.7	MDL	51.8	PQL	mg/Kg	J	Q
TIN	3.05	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.92	J	0.871	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-328-SA5B-SB-3.5-4.5 ***Collected:*** 2/9/2011 9:54:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.946	U	0.946	MDL	5.32	PQL	mg/Kg	UJ	I
CALCIUM	3640		6.52	MDL	21.3	PQL	mg/Kg	J	E
PHOSPHORUS	307		0.596	MDL	10.6	PQL	mg/Kg	J	E
POTASSIUM	2940		19.1	MDL	53.2	PQL	mg/Kg	J	Q
TIN	2.73	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.893	MDL	5.32	PQL	mg/Kg	UJ	I, B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-314-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 9:08:00 AM ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.210	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-314-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 9:08:00 AM ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.68		0.0535	MDL	0.107	PQL	mg/Kg	J	E

Sample ID: SL-314-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 9:08:00 AM ***Analysis Type:*** REA4 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	413		0.289	MDL	1.07	PQL	mg/Kg	J	E, A

Sample ID: SL-314-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 9:08:00 AM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.137	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
CHROMIUM	21.0		0.128	MDL	0.428	PQL	mg/Kg	J	Q, A
COBALT	6.86		0.0214	MDL	0.107	PQL	mg/Kg	J	E
LEAD	3.76		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	12.4		0.107	MDL	0.428	PQL	mg/Kg	J	A
SILVER	0.0266	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	41.4		0.0235	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-316-SA5B-SB-4.5-5.5 ***Collected:*** 2/9/2011 11:43:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0847	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-316-SA5B-SB-4.5-5.5 ***Collected:*** 2/9/2011 11:43:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.538		0.0513	MDL	0.103	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-316-SA5B-SB-4.5-5.5** ***Collected:*** **2/9/2011 11:43:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	88.8		0.111	MDL	0.410	PQL	mg/Kg	J	E, A

Sample ID: **SL-316-SA5B-SB-4.5-5.5** ***Collected:*** **2/9/2011 11:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0616	U	0.0616	MDL	0.205	PQL	mg/Kg	UJ	Q
CHROMIUM	15.7		0.123	MDL	0.410	PQL	mg/Kg	J	Q, A
COBALT	5.61		0.0205	MDL	0.103	PQL	mg/Kg	J	E
LEAD	6.38		0.0107	MDL	0.205	PQL	mg/Kg	J	Q, E
NICKEL	9.56		0.103	MDL	0.410	PQL	mg/Kg	J	A
SILVER	0.0337	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z
VANADIUM	33.8		0.0226	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 10:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.301	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 10:25:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.04		0.0519	MDL	0.104	PQL	mg/Kg	J	E

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 10:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.8		0.112	MDL	0.415	PQL	mg/Kg	J	E, A

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.144	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
CHROMIUM	17.1		0.124	MDL	0.415	PQL	mg/Kg	J	Q, A
COBALT	4.70		0.0207	MDL	0.104	PQL	mg/Kg	J	E
LEAD	4.27		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	10.3		0.104	MDL	0.415	PQL	mg/Kg	J	A
SILVER	0.0352	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	33.4		0.0228	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SL-323-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 3:14:00 PM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.103	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: **SL-323-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 3:14:00 PM** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.659		0.0503	MDL	0.101	PQL	mg/Kg	J	E

Sample ID: **SL-323-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 3:14:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	85.2		0.109	MDL	0.403	PQL	mg/Kg	J	E, A

Sample ID: **SL-323-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 3:14:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0986	J	0.0604	MDL	0.201	PQL	mg/Kg	J	Z, Q
CHROMIUM	17.8		0.121	MDL	0.403	PQL	mg/Kg	J	Q, A
COBALT	5.27		0.0201	MDL	0.101	PQL	mg/Kg	J	E
LEAD	7.14		0.0105	MDL	0.201	PQL	mg/Kg	J	Q, E
NICKEL	11.3		0.101	MDL	0.403	PQL	mg/Kg	J	A
SILVER	0.0594	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	33.2		0.0222	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: **SL-324-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 2:24:00 PM** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.52		0.0518	MDL	0.104	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-324-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 2:24:00 PM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.6		0.112	MDL	0.414	PQL	mg/Kg	J	E, A

Sample ID: **SL-324-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 2:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0991	J	0.0621	MDL	0.207	PQL	mg/Kg	J	Z, Q
CHROMIUM	26.0		0.124	MDL	0.414	PQL	mg/Kg	J	Q, A
COBALT	4.97		0.0207	MDL	0.104	PQL	mg/Kg	J	E
LEAD	4.97		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, E
NICKEL	12.5		0.104	MDL	0.414	PQL	mg/Kg	J	A
SILVER	0.0454	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	35.8		0.0228	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 11:25:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.142	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 11:25:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.39		0.0518	MDL	0.104	PQL	mg/Kg	J	E

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 11:25:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.3		0.112	MDL	0.415	PQL	mg/Kg	J	E, A

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 11:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.177	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
CHROMIUM	20.6		0.124	MDL	0.415	PQL	mg/Kg	J	Q, A
COBALT	5.78		0.0207	MDL	0.104	PQL	mg/Kg	J	E
LEAD	7.64		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 11:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	14.9		0.104	MDL	0.415	PQL	mg/Kg	J	A
SILVER	0.0632	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	37.6		0.0228	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 AM** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 AM** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.360		0.0532	MDL	0.106	PQL	mg/Kg	J	E

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 AM** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	67.8		0.115	MDL	0.425	PQL	mg/Kg	J	E, A

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0638	U	0.0638	MDL	0.213	PQL	mg/Kg	UJ	Q
CADMIUM	0.0765	J	0.0425	MDL	0.106	PQL	mg/Kg	J	Z
CHROMIUM	14.5		0.128	MDL	0.425	PQL	mg/Kg	J	Q, A
COBALT	4.62		0.0213	MDL	0.106	PQL	mg/Kg	J	E
LEAD	4.76		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	8.97		0.106	MDL	0.425	PQL	mg/Kg	J	A
SILVER	0.0699	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	27.3		0.0234	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 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
HEXAVALENT CHROMIUM	0.32	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-323-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 3:14:00 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	0.59	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: **SL-324-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 2:24:00 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	0.23	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 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
HEXAVALENT CHROMIUM	0.25	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 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	0.81	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: **SL-316-SA5B-SB-4.5-5.5** ***Collected:*** **2/9/2011 11:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0046	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 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
MERCURY	0.0198	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: **SL-323-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 3:14:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0124	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: **SL-324-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 2:24:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0193	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: **SL-328-SA5B-SB-3.5-4.5** ***Collected:*** **2/9/2011 9:54:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0116	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **SL-314-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 9:08:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.73	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: **SL-314-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 9:08:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	9.7	U	9.7	MDL	14	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.4	U	5.4	MDL	14	PQL	mg/Kg	UJ	C
Propylene glycol	5.4	U	5.4	MDL	14	PQL	mg/Kg	UJ	C

Sample ID: **SL-316-SA5B-SB-4.5-5.5** ***Collected:*** **2/9/2011 11:43:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	8.5	U	8.5	MDL	13	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.3	U	5.3	MDL	13	PQL	mg/Kg	UJ	C
Propylene glycol	5.3	U	5.3	MDL	13	PQL	mg/Kg	UJ	C

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-328-SA5B-SB-3.5-4.5 ***Collected:*** 2/9/2011 9:54:00 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	8.6	U	8.6	MDL	13	PQL	mg/Kg	UJ	C
ETHYLENE GLYCOL	5.4	U	5.4	MDL	13	PQL	mg/Kg	UJ	C
Propylene glycol	5.4	U	5.4	MDL	13	PQL	mg/Kg	UJ	C

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-314-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 9:08:00 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
BETA-BHC	0.092	J	0.065	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-324-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 2:24:00 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
Chlordane	2.1	J	0.85	MDL	3.6	PQL	ug/Kg	J	Z, *XIII
ENDRIN KETONE	0.34	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, *XIII

Sample ID: SL-326-SA5B-SS-0.0-0.5 ***Collected:*** 2/9/2011 11:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.26	U	0.26	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDT	1.2	U	1.2	MDL	1.2	PQL	ug/Kg	UJ	S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.31	U	0.31	MDL	0.31	PQL	ug/Kg	UJ	S
Chlordane	4.5	U	4.5	MDL	4.5	PQL	ug/Kg	UJ	S
DELTA-BHC	0.077	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z, S, *XIII
DIELDRIN	2.1	U	2.1	MDL	2.1	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.15	U	0.15	MDL	0.36	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-326-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 11:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	1.1	U	1.1	MDL	1.1	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.13	J	0.063	MDL	0.18	PQL	ug/Kg	J	Z, S, *XIII
HEPTACHLOR EPOXIDE	0.13	U	0.13	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	1.7	U	1.7	MDL	1.7	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	UJ	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-314-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 9:08:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: **SL-316-SA5B-SB-4.5-5.5** ***Collected:*** **2/9/2011 11:43:00** ***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	0.76	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-319-SA5B-SS-0.0-0.5** ***Collected:*** **2/9/2011 10:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.1	U	2.1	MDL	7.1	PQL	ug/Kg	UJ	L
Aroclor 5442	2.1	U	2.1	MDL	7.1	PQL	ug/Kg	UJ	L
Aroclor 5460	2.1	U	2.1	MDL	7.1	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

.ab Reporting Batch ID: DE079 **Laboratory: LL**

:DD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-323-SA5B-SS-0.0-0.5 **Collected: 2/9/2011 3:14:00 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	0.69	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.86	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-324-SA5B-SS-0.0-0.5 **Collected: 2/9/2011 2:24:00 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	2.4		0.35	MDL	1.8	PQL	ug/Kg	J	*XIII
AROCLOR 1260	0.64	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-326-SA5B-SS-0.0-0.5 **Collected: 2/9/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-328-SA5B-SB-3.5-4.5 **Collected: 2/9/2011 9:54:00 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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_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
*XIII and *IX	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

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	Interference Check Sample Analysis
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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE079

Method Blank Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04208BB221631	2/14/2011 4:31:00 PM	PHOSPHORUS TIN	0.627 mg/Kg 1.39 mg/Kg	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5

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-314-SA5B-SS-0.0-0.5(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-316-SA5B-SB-4.5-5.5(RES)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-319-SA5B-SS-0.0-0.5(RES)	TIN	2.21 mg/Kg	2.21U mg/Kg
SL-323-SA5B-SS-0.0-0.5(RES)	TIN	2.48 mg/Kg	2.48U mg/Kg
SL-324-SA5B-SS-0.0-0.5(RES)	TIN	2.02 mg/Kg	2.02U mg/Kg
SL-326-SA5B-SS-0.0-0.5(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-328-SA5B-SB-3.5-4.5(RES)	TIN	2.73 mg/Kg	2.73U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04226AB221910A	2/23/2011 7:10:00 PM	COPPER LEAD	0.247 mg/Kg 0.0188 mg/Kg	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P45451AB241812A	2/15/2011 6:12:00 PM	MCPP	88 ug/Kg	SL-323-SA5B-SS-0.0-0.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB68B211247A	2/11/2011 12:47:00 PM	ACETONE CHLOROFORM METHYLENE CHLORIDE TOLUENE	9.5 ug/Kg 0.23 ug/Kg 0.54 ug/Kg 0.11 ug/Kg	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_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-316-SA5B-SB-4.5-5.5(RES)	METHYLENE CHLORIDE	0.86 ug/Kg	3.8U ug/Kg
SL-316-SA5B-SB-4.5-5.5(RES)	TOLUENE	0.16 ug/Kg	3.8U ug/Kg
SL-328-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	3.9U ug/Kg
SL-328-SA5B-SB-3.5-4.5(RES)	TOLUENE	0.18 ug/Kg	3.9U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB04B261536	2/13/2011 3:36:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-octylphthalate	8.3 ug/Kg 6.3 ug/Kg	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5

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-319-SA5B-SS-0.0-0.5(DL)	BIS(2-ETHYLHEXYL)PHTHALATE	1400 ug/Kg	1400U ug/Kg
SL-323-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	120 ug/Kg	190U ug/Kg
SL-324-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	400 ug/Kg	400U ug/Kg
SL-326-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	120 ug/Kg	190U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_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-314-SA5B-SS-0.0-0.5MS (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5)	CHROMIUM LEAD	166 129	- -	75.00-125.00 75.00-125.00	- -	CHROMIUM LEAD	J (all detects)
SL-314-SA5B-SS-0.0-0.5MS **SL-314-SA5B-SS-0.0-0.5MSD** (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5)	ANTIMONY VANADIUM	52 -	52 45	75.00-125.00 75.00-125.00	- -	ANTIMONY VANADIUM	J(all detects) UJ(all non-detects)
SL-314-SA5B-SS-0.0-0.5MS **SL-314-SA5B-SS-0.0-0.5MSD** (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5)	BARIUM	-3133	-3018	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-314-SA5B-SS-0.0-0.5MS **SL-314-SA5B-SS-0.0-0.5MSD** (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5)	ALUMINUM IRON MAGNESIUM POTASSIUM TITANIUM	1617 859 226 127 265	1550 866 245 - 305	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MAGNESIUM POTASSIUM TITANIUM	J(all detects) Al, Fe, Mg, Ti No Qual, >4x
SL-314-SA5B-SS-0.0-0.5MS **SL-314-SA5B-SS-0.0-0.5MSD** (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5)	CALCIUM PHOSPHORUS	-699 -236	-574 -241	75.00-125.00 75.00-125.00	- -	CALCIUM PHOSPHORUS	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_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-314-SA5B-SS-0.0-0.5MSD	Di-n-octylphthalate	-	134	56.00-126.00	-	Di-n-octylphthalate	J(all detects)
(SL-314-SA5B-SS-0.0-0.5)	HEXACHLOROCYCLOPENTADI	-	-	10.00-153.00	57 (30.00)	HEXACHLOROCYCLOPENTAD	
SL-314-SA5B-SS-0.0-0.5MS	BENZIDINE	30	-	35.00-141.00	-	BENZIDINE	J(all detects)
(SL-314-SA5B-SS-0.0-0.5)	N-NITROSODIPHENYLAMINE	80	-	86.00-145.00	-	N-NITROSODIPHENYLAMINE	UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-314-SA5B-SS-0.0-0.5DUP	BORON	29	20.00	
(SL-314-SA5B-SS-0.0-0.5	CALCIUM	57	20.00	
SL -316-SA5B-SB-4.5-5.5	PHOSPHORUS	46	20.00	
SL -319-SA5B-SS-0.0-0.5				J (all detects)
SL -323-SA5B-SS-0.0-0.5				UJ (all non-detects)
SL -324-SA5B-SS-0.0-0.5				
SL -326-SA5B-SS-0.0-0.5				B No Qual
SL -328-SA5B-SB-3.5-4.5)				OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-314-SA5B-SS-0.0-0.5DUP	BARIUM	138	20.00	
(SL-314-SA5B-SS-0.0-0.5	BERYLLIUM	21	20.00	J(all detects)
SL -316-SA5B-SB-4.5-5.5	COBALT	25	20.00	UJ(all non-detects)
SL -319-SA5B-SS-0.0-0.5	LEAD	22	20.00	
SL -323-SA5B-SS-0.0-0.5	MOLYBDENUM	41	20.00	Be, Se, Ag No Qual
SL -324-SA5B-SS-0.0-0.5	SELENIUM	47	20.00	OK by difference
SL -326-SA5B-SS-0.0-0.5	SILVER	50	20.00	
SL -328-SA5B-SB-3.5-4.5)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-314-SA5B-SS-0.0-0.5DUP	MERCURY	200	20.00	
(SL-314-SA5B-SS-0.0-0.5				
SL -316-SA5B-SB-4.5-5.5				
SL -319-SA5B-SS-0.0-0.5				No Qual
SL -323-SA5B-SS-0.0-0.5				OK by difference
SL -324-SA5B-SS-0.0-0.5				
SL -326-SA5B-SS-0.0-0.5				
SL -328-SA5B-SB-3.5-4.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-324-SA5B-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	76	20.00	
(SL-314-SA5B-SS-0.0-0.5				
SL -316-SA5B-SB-4.5-5.5				
SL -319-SA5B-SS-0.0-0.5				No Qual
SL -323-SA5B-SS-0.0-0.5				OK by difference
SL -324-SA5B-SS-0.0-0.5				
SL -326-SA5B-SS-0.0-0.5				
SL -328-SA5B-SB-3.5-4.5)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_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
P10465AQ240300A (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J (all detects)
	2,6-DINITROTOLUENE	121	-	80.00-120.00	-	2,6-DINITROTOLUENE	
	2-AMINO-4,6-DINITROTOLUENE	123	-	80.00-120.00	-	2-AMINO-4,6-DINITROTOLUEN	
	NITROBENZENE	122	-	80.00-120.00	-	NITROBENZENE	
	PETN	126	-	80.00-120.00	-	PETN	

Method: 8082

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10464AQ242048A (SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5)	Aroclor 5442	57	-	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8260B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B68Y211421A (SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5)	2-Chloro-1,1,1-trifluoroethane	-	75	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-323-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	166	20.00-120.00	All Target Analytes	No Qual Diluted Out
SL-326-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	322	20.00-120.00	All Target Analytes	J(all detects)
SL-326-SA5B-SS-0.0-0.5	TETRACHLORO-M-XYLENE	43	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-328-SA5B-SB-3.5-4.5	Nitrate-NO3	J	0.95	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SS-0.0-0.5	BORON	J	2.18	5.41	PQL	mg/Kg	J (all detects)
	TIN	J	2.33	10.8	PQL	mg/Kg	
	Zirconium	J	3.72	5.41	PQL	mg/Kg	
SL-316-SA5B-SB-4.5-5.5	TIN	J	2.63	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.49	5.18	PQL	mg/Kg	
SL-319-SA5B-SS-0.0-0.5	BORON	J	2.23	5.19	PQL	mg/Kg	J (all detects)
	TIN	J	2.21	10.4	PQL	mg/Kg	
	Zirconium	J	2.67	5.19	PQL	mg/Kg	
SL-323-SA5B-SS-0.0-0.5	TIN	J	2.48	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.36	5.13	PQL	mg/Kg	
SL-324-SA5B-SS-0.0-0.5	BORON	J	4.03	5.18	PQL	mg/Kg	J (all detects)
	TIN	J	2.02	10.4	PQL	mg/Kg	
	Zirconium	J	4.02	5.18	PQL	mg/Kg	
SL-326-SA5B-SS-0.0-0.5	TIN	J	3.05	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.92	5.18	PQL	mg/Kg	
SL-328-SA5B-SB-3.5-4.5	TIN	J	2.73	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.39	5.32	PQL	mg/Kg	

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SS-0.0-0.5	ANTIMONY	J	0.137	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.210	0.428	PQL	mg/Kg	
	SILVER	J	0.0266	0.107	PQL	mg/Kg	
SL-316-SA5B-SB-4.5-5.5	SELENIUM	J	0.0847	0.410	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0337	0.103	PQL	mg/Kg	
SL-319-SA5B-SS-0.0-0.5	ANTIMONY	J	0.144	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.301	0.415	PQL	mg/Kg	
	SILVER	J	0.0352	0.104	PQL	mg/Kg	
SL-323-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0986	0.201	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.103	0.403	PQL	mg/Kg	
	SILVER	J	0.0594	0.101	PQL	mg/Kg	
SL-324-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0991	0.207	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0454	0.104	PQL	mg/Kg	
SL-326-SA5B-SS-0.0-0.5	ANTIMONY	J	0.177	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.142	0.415	PQL	mg/Kg	
	SILVER	J	0.0632	0.104	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-328-SA5B-SB-3.5-4.5	CADMIUM	J	0.0765	0.106	PQL	mg/Kg	
	SELENIUM	J	0.114	0.425	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0699	0.106	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-319-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.0	PQL	mg/Kg	J (all detects)
SL-324-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-326-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)
SL-328-SA5B-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.81	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-316-SA5B-SB-4.5-5.5	MERCURY	J	0.0046	0.102	PQL	mg/Kg	J (all detects)
SL-319-SA5B-SS-0.0-0.5	MERCURY	J	0.0198	0.104	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SS-0.0-0.5	MERCURY	J	0.0124	0.103	PQL	mg/Kg	J (all detects)
SL-324-SA5B-SS-0.0-0.5	MERCURY	J	0.0193	0.105	PQL	mg/Kg	J (all detects)
SL-328-SA5B-SB-3.5-4.5	MERCURY	J	0.0116	0.101	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SS-0.0-0.5	EFH (C15-C20)	J	0.73	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SS-0.0-0.5	BETA-BHC	J	0.092	0.18	PQL	ug/Kg	J (all detects)
SL-324-SA5B-SS-0.0-0.5	Chlordane	J	2.1	3.6	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.34	0.36	PQL	ug/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-326-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.077	0.18	PQL	ug/Kg	J (all detects)
	HEPTACHLOR	J	0.13	0.18	PQL	ug/Kg	

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-316-SA5B-SB-4.5-5.5	AROCLOR 1260	J	0.76	1.8	PQL	ug/Kg	J (all detects)
SL-323-SA5B-SS-0.0-0.5	AROCLOR 1254	J	0.69	1.8	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.86	1.8	PQL	ug/Kg	
SL-324-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.64	1.8	PQL	ug/Kg	J (all detects)

Method: 8151A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-324-SA5B-SS-0.0-0.5	2,4,5-TP (Silvex)	J	0.11	0.18	PQL	ug/Kg	J (all detects)
	2,4-DB	J	1.4	1.8	PQL	ug/Kg	

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-316-SA5B-SB-4.5-5.5	ETHYLBENZENE	J	0.16	3.8	PQL	ug/Kg	J (all detects)
	ISOPROPYLBENZENE	J	0.09	3.8	PQL	ug/Kg	
	m,p-Xylene	J	0.56	3.8	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.86	3.8	PQL	ug/Kg	
	TOLUENE	J	0.16	3.8	PQL	ug/Kg	
SL-328-SA5B-SB-3.5-4.5	ETHYLBENZENE	J	0.07	3.9	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.22	3.9	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	1.1	3.9	PQL	ug/Kg	
	TOLUENE	J	0.18	3.9	PQL	ug/Kg	

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	J (all detects)
SL-316-SA5B-SB-4.5-5.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	360	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-323-SA5B-SS-0.0-0.5	ANTHRACENE	J	26	170	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	83	170	PQL	ug/Kg	
	BENZO(A)PYRENE	J	64	170	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	87	170	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	87	170	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	42	170	PQL	ug/Kg	
	CHRYSENE	J	77	170	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	64	170	PQL	ug/Kg	
	PHENANTHRENE	J	110	170	PQL	ug/Kg	
	PYRENE	J	160	170	PQL	ug/Kg	
SL-326-SA5B-SS-0.0-0.5	ANTHRACENE	J	21	180	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	60	180	PQL	ug/Kg	
	BENZO(A)PYRENE	J	79	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	110	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	73	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	38	180	PQL	ug/Kg	
	CHRYSENE	J	73	180	PQL	ug/Kg	
	FLUORANTHENE	J	110	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	82	180	PQL	ug/Kg	
	PHENANTHRENE	J	63	180	PQL	ug/Kg	
	PYRENE	J	110	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-314-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.77	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.99	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.90	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.7	19	PQL	ug/Kg	
	FLUORANTHENE	J	0.91	1.8	PQL	ug/Kg	
	PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-316-SA5B-SB-4.5-5.5	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.4	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.82	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.82	1.8	PQL	ug/Kg	
SL-319-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.59	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.2	19	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
SL-323-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	120	190	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	130	190	PQL	ug/Kg	
SL-324-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	8.3	18	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	3.6	18	PQL	ug/Kg	
SL-326-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	120	190	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	75	190	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE079 **Laboratory: LL**

EDD Filename: DE079_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-328-SA5B-SB-3.5-4.5	PYRENE	J	8.1	18	PQL	ug/Kg	J (all detects)

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5
TB-020911

Introduction

This data review covers 2 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 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.

N Presumptive evidence of presence of the constituent.

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
2/11/11 (bf11C01)	2-Butanone	28	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	J (all detects) UJ (all non-detects)	A
	2-Chloroethylvinyl ether	29	VBLKB68	J (all detects) UJ (all non-detects)	
2/11/11 (bf11C02)	Chlorotrifluoroethene	28	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5 VBLKB68	J (all detects) UJ (all non-detects)	A

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
11/23/10 (bn23CV3)	2-Hexanone	28	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5 VBLKB68	J (all detects) UJ (all non-detects)	A
2/10/11 (yf10V20)	Dichlorodifluoromethane Acetone	30 28	TB-020911 VBLKY05	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
2/10/11 (yf10V31)	Chlorotrifluoroethene	32	TB-020911 VBLKY05	J (all detects) UJ (all non-detects)	A

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
VBLKB68	2/11/11	Acetone Methylene chloride Chloroform Toluene	9.5 ug/Kg 0.54 ug/Kg 0.23 ug/Kg 0.11 ug/Kg	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5

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-316-SA5B-SB-4.5-5.5	Methylene chloride Toluene	0.86 ug/Kg 0.16 ug/Kg	3.8U ug/Kg 3.8U ug/Kg
SL-328-SA5B-SB-3.5-4.5	Methylene chloride Toluene	1.1 ug/Kg 0.18 ug/Kg	3.9U ug/Kg 3.9U ug/Kg

Sample TB-020911 was identified as a trip blank. No volatile contaminants were found in this blank.

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

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) 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/DB68 (SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5 VBLKB68)	Freon 133a	-	75 (78-120)	-	J (all detects) UJ (all non-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 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 DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	2-Butanone 2-Chloroethylvinyl ether Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE079	TB-020911	Dichlorodifluoromethane Acetone Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	Freon 133a	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5 TB-020911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE079

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE079	SL-316-SA5B-SB-4.5-5.5	Methylene chloride Toluene	3.8U ug/Kg 3.8U ug/Kg	A	B
DE079	SL-328-SA5B-SB-3.5-4.5	Methylene chloride Toluene	3.9U ug/Kg 3.9U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C1a **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV
2nd Reviewer: A

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: 2/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 % r
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25%
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec
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/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 3

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-316-SA5B-SB-4.5-5.5 S	11	VBLKB68	21		31	
2	SL-328-SA5B-SB-3.5-4.5	12	VBLKY05	22		32	
3	TB-020911 W	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 #: 25764 C1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
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) $\geq$ 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?	✓			

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	lll. 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. Chlorotrifluoroethene
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO. Freon 133a
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 #: 25764C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: VB
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	11/23/10	bn23cv3	Z	28		1, 2, VBLKB68	J/UJ/A (c)
		(ICV)					
	2/10/11	yf10v20	JJ	30		3, VBLKY05	
		(ICV)	F	28			
	2/10/11	yf10v31	NNNN	32			
		(ICV)					
	2/11/11	bf11c01	M	28		1, 2, VBLKB68	
		(CCV)	II	29			
	2/11/11	bf11c02	NNNN	28			
		(CCV)					

LDC #: 25764 C1a

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: SVL
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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.

Blank analysis date: 2/11/11
Conc. units: ug/kg
Associated Samples: 1, 2 Code: B

Compound	Blank ID	Sample Identification								
	VBLKB68	1	2							
~~Methylene chloride~~ F	9.5									
~~Acetone~~ E	0.54	0.86/3.8U	1.1/3.9U							
K	0.23									
CC	0.11	0.16/3.8U	0.18/3.9U							
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
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 #: 25764C1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: MG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D B68	~~NNNN~~ a	( )	75 (78-120)	( )	1, 2, VBLK B68	J/UJ/P (L)
		0000	( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25764 C1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

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

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/23/10	Acetone (FBZ)	0.0717	0.0717	0.0723	0.0723	8	8
	HP09953		Toluene (CBZ)	0.7997	0.7997	0.8561	0.8561	9	9
			1,1,2,2-TCA (DCB)	0.7128	0.7128	0.7300	0.7300	8	8

Cis/Cx	Ax	Ais
50/100	207734	1448770
50/50	825663	1032447
50/50	408310	572795

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0811	1.0037	0.8383
10	0.0760	0.8695	0.7400
20	0.0660	0.8578	0.7113
50	0.0717	0.7997	0.7128
100	0.0721	0.7955	0.6946
300	0.0671	0.8105	0.6830
S =	0.0723	0.8561	0.7300
X =	0.0056	0.0786	0.0565

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 #: 25764 C1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

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

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/10/11	Acetone (FBZ)	0.0410	0.0410	0.0429	0.0429	14	14
	HP09953		Toluene (CBZ)	1.0041	1.0041	0.9969	0.9969	3	3
			1,1,2,2-TCA (DCB)	0.9767	0.9767	0.9569	0.9569	7	7

Cis/Cx	Ax	Ais
50/100	89674	1092991
50/50	801855	798571
50/50	469555	480763

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0509	0.9810	0.9274
10	0.0498	1.0449	1.0560
20	0.0411	0.9670	0.9796
50	0.0410	1.0041	0.9767
100	0.0392	0.9917	0.9563
300	0.0352	0.9929	0.8454
S =	0.0429	0.9969	0.9569
X =	0.0062	0.0266	0.0693

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 # 25764C1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	bf11c01	2/11/11	Methylene chloride (FBZ)	0.2614	0.2610	0.2610	0	0
	HP09953		Toluene (CBZ)	0.8561	0.8856	0.8856	3	3
			1,1,2,2-TCA (DCB)	0.7300	0.7133	0.7133	2	2
2	yf14c01	2/14/11	Acetone (FBZ)	0.0429	0.0416	0.0416	3	3
	HP09953		Toluene (CBZ)	0.9969	0.9891	0.9891	1	1
			1,1,2,2-TCA (DCB)	0.9569	1.0603	1.0603	11	11

CCV1

Cis/Cx	Compound	Response cpd	Response IS
50/50	Methylene chloride (FBZ)	380887	1459472
50/50	Toluene (CBZ)	891505	1006709
50/50	1,1,2,2-TCA (DCB)	451458	632946

CCV2

Cis/Cx	Compound	Response cpd	Response IS
50/100	Acetone (FBZ)	99033	1190516
50/50	Toluene (CBZ)	862096	871602
50/50	1,1,2,2-TCA (DCB)	574447	541788

LDC #: 25764 C1a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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
Toluene-d8	50	51.72	103	103	0
Bromofluorobenzene		43.4	87	87	
1,2-Dichloroethane-d4		53.33	107	107	
Dibromofluoromethane		55.23	110	110	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25764 CNb

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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 = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D B68

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	20	20.26	19.05	101	101	95	95	6	6
Trichloroethene			19.42	18.99	97	97	95	95	2	2
Benzene			20.13	19.52	101	101	98	98	3	3
Toluene			19.79	19.29	99	99	96	96	3	3
Chlorobenzene			19.96	19.11	100	100	96	96	4	4

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.

DC #: 25764 C1A

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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, MeCl ✓

Conc. = $\frac{(5536)(50)(5\text{ml})}{(1176887)(0.2614)(5.56\text{ g})(0.925)}$

= 0.87 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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5
TB-020911

Introduction

This data review covers 2 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 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.

N Presumptive evidence of presence of the constituent.

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-020911 was identified as a trip blank. No 1,4-dioxane was found in this blank.

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

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) 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 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 DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5 TB-020911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C1b **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV
2nd Reviewer:

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: 2/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client Spec
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/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 3

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-316-SA5B-SB-4.5-5.5 S	11	VBLKE26	21		31	
2	SL-328-SA5B-SB-3.5-4.5	12	VBLKE24	22		32	
3	TB-020911 W	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 #: 25764 CM6

VALIDATION FINDINGS CHECKLIST

Reviewer: JM6
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 $\geq$ 0.990?			✓	
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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?	✓			

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.		✓		

LDC # 25764 C1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/1/10	1,4-Dioxane (1,4-D-d8)	1.3193	1.3359	1.3219	1.3219	1	1
	HP15648								

Cis/Cx	Ax	Ax
10/10	29359	21977

Conc	RRF
0.5	1.3291
2.0	1.3004
5.0	1.3359
10.0	1.3193
25.0	1.3248
X =	1.3219
S =	0.0135

LDC # 25764C1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1,4-D-d8)	1.3392	1.3392	1.3396	1.3396	2	2
	HP15648								

Cis/Cx	Ax	Ax
10/10	25596	19113

Conc	RRF
0.5	1.3082
2.0	1.3793
5.0	1.3539
10.0	1.3392
25.0	1.3175
X =	1.3396
S =	0.0285

LDC # 25764 C1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ef15c01	2/15/11	1,4-Dioxane (1,4-D-d8)	1.3396	1.3826	1.3826	3	3
	HP15648							
2	ef14c01	2/14/11	1,4-Dioxane (1,4-D-d8)	1.3219	1.3619	1.3619	3	3
	HP15648							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	1,4-Dioxane (1,4-D-d8)	10/10	26261	18994
CCV2	1,4-Dioxane (1,4-D-d8)	10/10	17671	12975

LDC #: 25764c1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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
Toluene-d8	10	9.449	94	94	0
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25764 C1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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 LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D E26

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
1,4-Dioxane (1,1-Dichloroethene)	125	125	135.45	146.86	108	108	117	117	8	8
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.

SDC #: 25764 C1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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. _____ , _____ MD

Conc. = $\frac{(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: February 9, 2010

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5
SL-328-SA5B-SB-3.5-4.5
SL-314-SA5B-SS-0.0-0.5MS
SL-314-SA5B-SS-0.0-0.5MSD

Introduction

This data review covers 9 soil 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.

N Presumptive evidence of presence of the constituent.

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
2/16/11	2,4-Dinitrophenol	35	All samples in SDG DE079	J (all detects) UJ (all non-detects)	A
	3,3'-Dichlorobenzidine	32		J (all detects) UJ (all non-detects)	

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
2/8/11	Benzoic acid	48	All samples in SDG DE079	J (all detects) UJ (all non-detects)	A

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.

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.

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-314-SA5B-SS-0.0-0.5MS/MSD (SL-314-SA5B-SS-0.0-0.5)	Hexachlorocyclopentadiene	-	-	57 (≤30)	J (all detects)	A
	Di-n-octylphthalate	-	134 (56-126)	-	J (all detects)	
SL-314-SA5B-SS-0.0-0.5MS/MSD (SL-314-SA5B-SS-0.0-0.5)	N-Nitrosodiphenylamine	80 (86-145)	-	-	J (all detects) UJ (all non-detects)	A
	Benzidine	30 (35-141)	-	-	J (all detects) UJ (all non-detects)	

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 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 DE079	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
Semivolatiles - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	2,4-Dinitrophenol 3,3'-Dichlorobenzidine	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Benzoic acid	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE079	SL-314-SA5B-SS-0.0-0.5	Hexachlorocyclopentadiene	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE079	SL-314-SA5B-SS-0.0-0.5	Di-n-octylphthalate	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE079	SL-314-SA5B-SS-0.0-0.5	N-Nitrosodiphenylamine Benzidine	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C2a **VALIDATION COMPLETENESS WORKSHEET** Date: 7/08/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVL
2nd Reviewer: A

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: 2/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30% r✓
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
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/CRQLs	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-314-SA5B-SS-0.0-0.5	11	SBLK LA04✓	21		31	
+ 2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
- 3	SL-319-SA5B-SS-0.0-0.5	13		23		33	
+ 4	SL-323-SA5B-SS-0.0-0.5	14		24		34	
- 5	SL-324-SA5B-SS-0.0-0.5	15		25		35	
+ 6	SL-326-SA5B-SS-0.0-0.5	16		26		36	
- 7	SL-328-SA5B-SB-3.5-4.5	17		27		37	
8	SL-314-SA5B-SS-0.0-0.5MS	18		28		38	
9	SL-314-SA5B-SS-0.0-0.5MSD	19		29		39	
10		20		30		40	

DC #: 25764 C2a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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 $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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 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 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?	NO	✓		
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?	✓			

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/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.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 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.
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.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25764C2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: MC
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a continuing calibration standard analyzed at least once every 12 hours of sample analysis for each instrument?

(Y) N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y (N) N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: <25.0%)	Finding RRF (Limit: >0.05)	Associated Samples	Qualifications
	2/08/11	lb008 (ICV)	PPP	48		All	J/UJ/A (C)
	2/16/11	lb067 (CCV)	HH	35			
			BBB	32			

LDC #: 25764 C2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: JV6
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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
		8/9	X	( )	( )	57 (30)	1	J dets/A (Q)
			DQ	80 (86-145)	( )	( )	↓	J/UJ A
			SSS	30 (35-141)	( )	( )	↓	↓
			FFF	( )	134 (56-126)	( )	↓	J dets/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

	Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)		Compound	QC Limits (Soil)	RPD (Soil)	QC Limits (Water)	RPD (Water)
A.	Phenol	26-90%	≤ 35%	12-110%	≤ 42%	GG	Acenaphthene	31-137%	≤ 19%	46-118%	≤ 31%
C.	2-Chlorophenol	25-102%	≤ 50%	27-123%	≤ 40%	II.	4-Nitrophenol	11-114%	≤ 50%	10-80%	≤ 50%
E.	1,4-Dichlorobenzene	28-104%	≤ 27%	36-97%	≤ 28%	KK.	2,4-Dinitrotoluene	28-89%	≤ 47%	24-96%	≤ 38%
J.	N-Nitroso-di-n-propylamine	41-126%	≤ 38%	41-116%	≤ 38%	TT.	Pentachlorophenol	17-109%	≤ 47%	9-103%	≤ 50%
R.	1,2,4-Trichlorobenzene	38-107%	≤ 23%	39-98%	≤ 28%	ZZ.	Pyrene	35-142%	≤ 36%	26-127%	≤ 31%
V.	4-Chloro-3-methylphenol	26-103%	≤ 33%	23-97%	≤ 42%						

LDC #: 25764C2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

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 (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/08/11	Phenol (IS1)	2.002	2.002	1.948	1.948	7	7
			2,4-Dichlorophenol (IS2)	0.265	0.265	0.261	0.261	6	6
	TE17734		2,4,5-Trichlorophenol (IS3)	0.392	0.392	0.382	0.382	3	3
			Pentachlorophenol (IS4)	0.110	0.110	0.106	0.106	10	10
			Bis(2-ethylhexyl)phth (IS5)	1.108	1.108	1.068	1.068	8	8
			Benzo(a)pyrene (IS6)	1.136	1.136	1.097	1.097	7	7

Conc IS/Cpd	Area cpd	Area IS
40/50	534272	213519
40/50	301342	909448
40/50	196259	401030
40/50	74208	541566
40/50	492751	355870
40/50	507617	357599

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Bis(2-eh)phtha	Benzo(a)py
5	1.700	0.231	0.364	0.087	0.949	0.952
15	2.001	0.263	0.381	0.102	1.003	1.107
30	1.905	0.270	0.369	0.105	1.039	1.077
50	2.002	0.265	0.392	0.110	1.108	1.136
80	2.023	0.269	0.394	0.115	1.151	1.178
120	2.058	0.266	0.394	0.115	1.155	1.131
X =	1.948	0.261	0.382	0.106	1.068	1.097
S =	0.132	0.015	0.013	0.011	0.084	0.078

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 #: 25764C2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: SVL
2nd reviewer: ✓

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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	86.3	86	86	0
2-Fluorobiphenyl	↓	88.38	88	88	↓
Terphenyl-d14	↓	82.14	82	82	↓
Phenol-d5	200	178.2	89	89	↓
2-Fluorophenol	↓	197.35	99	99	↓
2,4,6-Tribromophenol	↓	201.31	101	101	↓
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 #: 25769 C2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: JVe
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 8/9

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	1666.67	1666.67	0	1413.6	1641.84	85	85	99	99	15	15
N-Nitroso-di-n-propylamine				1267.65	1500.2	76	76	90	90	17	17
4-Chloro-3-methylphenol				1323.65	1498.97	79	79	90	90	12	12
Acenaphthene				1395.26	1585.26	84	84	95	95	13	13
Pentachlorophenol				1087.77	1332.72	65	65	80	80	20	20
Pyrene				1396.95	1542.37	84	84	93	93	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 #: 25764C2a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 042 LA LCS

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	1666.67	NA	1595.18	NA	96	96				
N-Nitroso-di-n-propylamine			1491.87		88	88				
4-Chloro-3-methylphenol			1624.5		97	97				
~~Acenaphthene~~										
Pentachlorophenol			1419.41		85	85				
~~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 #: 25764C2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: SVG
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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. 4, Benzo(a)pyrene

Conc. = $\frac{(12107)(40)(1ml)(1000)(\quad)}{(240599)(1.097)(30g)(0.955)(\quad)}$

= 64.0 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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 7 soil samples 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.

N Presumptive evidence of presence of the constituent.

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
SBLKLB042	2/12/11	Di-n-octylphthalate	6.33 ug/Kg	SL-316-SA5B-SB-4.5-5.5

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKLB042	2/12/11	Bis(2-ethylhexyl)phthalate	8.33 ug/Kg	SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5

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-319-SA5B-SS-0.0-0.5 (50X)	Bis(2-ethylhexyl)phthalate	1400 ug/Kg	1400U ug/Kg
SL-323-SA5B-SS-0.0-0.5 (10X)	Bis(2-ethylhexyl)phthalate	120 ug/Kg	190U ug/Kg
SL-324-SA5B-SS-0.0-0.5 (10X)	Bis(2-ethylhexyl)phthalate	400 ug/Kg	400U ug/Kg
SL-326-SA5B-SS-0.0-0.5 (10X)	Bis(2-ethylhexyl)phthalate	120 ug/Kg	190U ug/Kg

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.

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) and 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 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 DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	All TCL compounds	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE079

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE079	SL-319-SA5B-SS-0.0-0.5 (50X)	Bis(2-ethylhexyl)phthalate	1400U ug/Kg	A	B
DE079	SL-323-SA5B-SS-0.0-0.5 (10X)	Bis(2-ethylhexyl)phthalate	190U ug/Kg	A	B
DE079	SL-324-SA5B-SS-0.0-0.5 (10X)	Bis(2-ethylhexyl)phthalate	400U ug/Kg	A	B
DE079	SL-326-SA5B-SS-0.0-0.5 (10X)	Bis(2-ethylhexyl)phthalate	190U ug/Kg	A	B

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C2b **VALIDATION COMPLETENESS WORKSHEET** Date: 7/28/11

SDG #: DE079 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: SVG

2nd Reviewer:

METHOD: GC/MS Polynuclear Aromatic Hydrocarbons ~~(EPA SW 846 Method 8270C-SIM)~~ SVOA

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: 2/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤ 30 % r ✓
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25 %
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
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/CRQLs	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-314-SA5B-SS-0.0-0.5	11	SBLKLB047	21		31	
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-319-SA5B-SS-0.0-0.5	13		23		33	
4	SL-323-SA5B-SS-0.0-0.5	14		24		34	
5	SL-324-SA5B-SS-0.0-0.5	15		25		35	
6	SL-326-SA5B-SS-0.0-0.5	16		26		36	
7	SL-328-SA5B-SB-3.5-4.5	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

.DC #: 25764C26

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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. Surrogate spikes				
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?	✓			

VALIDATION FINDINGS CHECKLIST

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/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.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 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.
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.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25764 c26

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: SV6
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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.

FFF = 2 (ND)

Blank extraction date: 2/12/11 **Blank analysis date:** 2/13/11

Conc. units: ug/kg Associated Samples: EEE = 3-6 Code: B

Compound	Blank ID	Sample Identification							
	SBLK LB042		3 (50x)	4 (10x)	5 (10x)	6 (10x)			
EEE	8.33		1400/U	120/190U	400/U	120/190U			
FFF	6.33								

Blank extraction date: _____ **Blank analysis date:** _____

Conc. units: _____ Associated Samples: _____

Compound	Blank ID	Sample Identification							

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 #: 25750C26

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

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 (IS)	Reported RRF (RRF 1.0 std)	Recalculated RRF (RRF 1.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/10/11	NDMA (IS1)	1.159	1.159	1.192	1.192	6	6
			Naphthalene (IS2)	1.067	1.067	1.116	1.116	8	8
	HP10976		Diethylphthalate (IS3)	1.254	1.254	1.331	1.331	12	12
			Phenanthrene (IS4)	1.129	0.811	1.189	1.189	8	8
			Chrysene (IS5)	1.104	1.104	1.153	1.154	8	8
			Benzo(a)pyrene (IS6)	1.055	1.055	1.065	1.065	11	11

Cis/Cx	Ax	Ais
1/1	73690	63603
1/1	299463	280698
1/1	208704	166448
1/1	232152	286279
1/1	361480	327481
1/1	328659	311383

Conc	NDMA	Naphthalene	Diethylphthalate	Phenanthrene	Chrysene	benzo(a)py
0.05	1.157	1.063	1.135	1.117	1.114	0.870
0.2	1.301	1.279	1.353	1.337	1.325	1.161
0.5	1.080	1.038	1.240	1.094	1.084	1.010
1	1.159	1.067	1.254	1.129	1.104	1.055
5	1.211	1.097	1.428	1.188	1.127	1.113
10	1.243	1.153	1.574	1.267	1.167	1.183
X =	1.1918	1.116	1.331	1.189	1.154	1.065
S =	0.077	0.089	0.156	0.096	0.088	0.115

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 # 25750 C2h

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ib0391	02/13/11	NDMA (IS1)	1.192	1.176	1.176	1	1
			Naphthalene (IS2)	1.116	1.041	1.041	7	7
	HP10976		Diethylphthalate (IS3)	1.331	1.235	1.235	7	7
			Phenanthrene (IS4)	1.189	1.094	1.094	8	8
			Chrysene (IS5)	1.153	1.080	1.080	6	6
			Benzo(a)pyrene (IS6)	1.065	0.971	0.971	9	9
2	ib0421	02/14/11	NDMA (IS1)	1.192	1.228	1.228	3	3
			Naphthalene (IS2)	1.116	1.061	1.061	5	5
	HP10976		Diethylphthalate (IS3)	1.331	1.340	1.340	1	1
			Phenanthrene (IS4)	1.189	1.120	1.120	6	6
			Chrysene (IS5)	1.153	1.109	1.109	4	4
			Benzo(a)pyrene (IS6)	1.065	1.052	1.052	1	1

CV1		CCV1		CCV2	
Cis/Cx	Compound (IS)	Ax	Ais	Ax	Ais
1/1	NDMA (IS1)	34215	58202	94337	76810
1/1	Naphthalene (IS2)	135274	259827	359969	339384
1/1	Diethylphthalate (IS3)	92046	149058	263979	197059
1/1	Phenanthrene (IS4)	143005	261493	359702	321144
1/1	Chrysene (IS5)	157017	290849	372238	335692
1/1	Benzo(a)pyrene (IS6)	135193	278381	356538	338856

LDC #: 16426

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: DVG
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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	0.97	97	97	0
2-Fluorobiphenyl		0.86	86	86	
Terphenyl-d14		1.04	104	105	
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 #: 12104C26

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: M
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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: 04 2LB LCS

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	33.33	NA	32.85	NA	99	99				
Pentachlorophenol										
Pyrene	33.33	"	36.85	"	111	111				

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 #: 25764C2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$$

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 ; Benzo(a)pyrene

Conc. = $\frac{(7731)(1.00)(1ml)(1000)(\quad)}{(265218)(1.065)(70g)(0.92)(\quad)}$

= 0.986

≈ 0.99 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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5
SL-314-SA5B-SS-0.0-0.5MS
SL-314-SA5B-SS-0.0-0.5MSD

Introduction

This data review covers 5 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.

N Presumptive evidence of presence of the constituent.

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 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% for N-Nitrosodimethylamine.

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 N-Nitrosodimethylamine.

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for N-Nitrosodimethylamine.

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.

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) 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 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 DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C2c **VALIDATION COMPLETENESS WORKSHEET** Date: 7/08/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: VV
2nd Reviewer: A

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	A	Sampling dates: 2/6a/11
II.	GC/MS Instrument performance check	N	Not reqd.
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV ≤ 20% ICV ≤ 30%
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	A	
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/CRQLs	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-314-SA5B-SS-0.0-0.5	11	SBLKLF0455	21		31	
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	13		23		33	
4	SL-314-SA5B-SS-0.0-0.5 MS			24		34	
5	SL-314-SA5B-SS-0.0-0.5 MSD			25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

DC #: 2E750C2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer: A

Method: ~~Semivolatiles~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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. Surrogate spikes				
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?	✓			

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/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.			✓	

LDC # 25780 C2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 25 std)	Recalculated RRF (RRF 25 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/11/2011	NDMA (NDMA-d6)	1.0090	1.0090	1.0375	1.0375	8	8
	TE16311								

Cis/Cx	Ax	Ax
25/25	118528	117474

Conc	RRF
1.0	1.126
5.0	1.153
10.0	1.001
25.0	1.009
50.0	0.987
100.0	0.949
X =	1.0375
S =	0.0821

LDC # 26750 (2nd)

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ab170c	2/21/2011	NDMA (NDMA-d6)	1.0375	0.92097	0.92097	11	11
	TE16311							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	NDMA (NDMA-d6)	25/25	107545	116773

LDC #: _____

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: M
2nd Reviewer: A

NDMA 1&2C
METHOD: GC/MS ~~BNA~~ (EPA SW 846 Method ~~8270C~~)

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 = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 4 15

Compound	Spike Added (ng/kg)		Sample Concentration (ng/kg)	Spiked Sample Concentration (ng/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
~~Phenol~~ NDMA	833.33	833.33	0	745.95	725.5	90	90	88	88	1	1
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											

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 #: A 764 C2C

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: C

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 045LF LCS

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~~ NDMA	833.33	NA	794.16	NA	95	95				
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 #: 24764C2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVB
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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. _____, MB

Conc. = ( )( )( )( )( ) / ( )( )( )( )( ) =

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081A for Chlorinated Pesticides.

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.

N Presumptive evidence of presence of the constituent.

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 single compounds was performed for the primary (quantitation) column and confirmation column as required by this 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.

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.

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.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0%.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were 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	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-326-SA5B-SS-0.0-0.5	A B	Tetrachloro-m-xylene Decachlorobiphenyl	43 (50-130) 322 (20-120)	All TCL compounds	J (all detects) UJ (all non-detects)	P

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. 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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

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-324-SA5B-SS-0.0-0.5	Endrin ketone Chlordane (Technical)	77 62	J (all detects) J (all detects)	A
SL-326-SA5B-SS-0.0-0.5	delta-BHC Heptachlor	73 94	J (all detects) J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Chlorinated Pesticides - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-326-SA5B-SS-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	P	Surrogate spikes (%R) (S)
DE079	SL-324-SA5B-SS-0.0-0.5	Endrin ketone Chlordane (Technical)	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE079	SL-326-SA5B-SS-0.0-0.5	delta-BHC Heptachlor	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C3a

SDG #: DE079

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-11-11

Page: 1 of 1

Reviewer: KA

2nd Reviewer: A

METHOD: GC Chlorinated Pesticides (EPA SW846 Method 8081A)

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: 2/9/11
II.	GC/ECD Instrument Performance Check	A-	
III.	Initial calibration	A	%RSD≤20, r²
IV.	Continuing calibration/ICV	A	ICV/CCV≤20%
V.	Blanks	A	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	N	Client specified
VIII.	Laboratory control samples	A	LCS
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 and reported CRQLs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	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: ALL SOIL

1 (5)	SL-314-SA5B-SS-0.0-0.5	11		21		31	11 04200 02 A-B
2 (9)	SL-319-SA5B-SS-0.0-0.5	12		22		32	
3 (10)	SL-323-SA5B-SS-0.0-0.5	13		23		33	
4 (12)	SL-324-SA5B-SS-0.0-0.5	14		24		34	
5 (14)	SL-326-SA5B-SS-0.0-0.5	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

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Notes: _____

LDC #: 25764C3c
SDG #: See cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: KT
2nd Reviewer: C

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___%R				
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?	✓			
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20% or percent recovieries 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?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up 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) of one or more surrogates was 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				

LDC #: 25764C3a
SDG #: 49 Cover

VALIDATION FINDINGS CHECKLIST

Reviewer: LM
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
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?			✓	
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, dry weight factors, and clean-up activities 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. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
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. 2,4'-DDD	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 25764C5A
SDG #: See cover

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: MF
2nd Reviewer: A

METHOD: ___ GC EPA 8081/8082 Pesticides/PCB's
Are surrogates required by the method? Yes X 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?

#	Date	Lab ID/Reference	Column	Surrogate Compound	%R (Limits)	Qualifications
		3 (5x)	A	B	166 (20-120)	no qual, dil 5x
					( )	
		5	A	A	43 (50-130)	J/UJ/P (5)
			B	B	322 (20-120)	↓
					( )	
					( )	
					( )	
					( )	
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					( )	
					( )	
					( )	

Letter Designation	Surrogate Compound	Recovery QC Limits (Soil)	Recovery QC Limits (Water)	Comments
A	Tetrachloro-m-xylene			
B	Decachlorobiphenyl			

LDC #: 25764C39
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: KM
2nd Reviewer: [signature]

METHOD: X 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?
Y N N/A Did the percent difference of detected compounds between two columns./detectors ≤40%?
If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD/%D Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	Q	4	77	J dets/A (X XIII)
	HH		62	J
	C	5	73	J dets/A (X XIII)
	E		94	J

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25764C39
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (10^{CF} std)	Recalculated CF (10^{CF} std)	Reported CF (initial)	Recalculated CF (intial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/15/11	D (CLA)	5.74 E3	5.74 E3	5.80 E3	5.80 E3	3.8	3.8
			O ↓	2.82 E3	2.82 E3	2.84 E3	2.84 E3	3.5	3.4
			D (ALB)	2.12 E3	2.12 E3	2.13 E3	2.13 E3	1.8	1.8
			O ↓	1.29 E3	1.29 E3	1.28 E3	1.28 E3	2.7	2.7
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 #: 25764C3c
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount (ng)
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount (ng)

Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported CF/Conc CCV	Recalculated CF/Conc CCV	Reported %D	Recalculated %D

See ICAL

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 #: B1464S9
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: MA
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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: 4

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene	B	1.04	0.769	74	74	0
Tetrachloro-m-xylene						
Decachlorobiphenyl	A	1.04	0.468	45	45	0
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 25764C3a
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: VV
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1104200002A – LCS

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.
gamma-BHC	0.33	n/a	0.29	n/a	88	88				
4,4'-DDT	0.65	n/a	0.67	n/a	103	103				
Aroclor 1260										

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 #: 25764C3<
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: VK
2nd reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

~~N~~ N N/A Were all reported results recalculated and verified for all level IV samples?
~~N~~ N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Example:

Sample I.D. 4 P:

Conc. = $\frac{(15423)(4\,mL)(A)}{(612)(GO_5)(.938)}$

=

1.8 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	February 9, 2011
LDC Report Date:	July 15, 2011
Matrix:	Soil
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5
SL-328-SA5B-SB-3.5-4.5
SL-314-SA5B-SS-0.0-0.5MS
SL-314-SA5B-SS-0.0-0.5MSD

Introduction

This data review covers 9 soil samples 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.

N Presumptive evidence of presence of the constituent.

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.

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.

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.

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 Compounds	Flag	A or P
110460014A-LCS/D (All samples in SDG DE079)	Aroclor-5442	57 (75-125)	-	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

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-324-SA5B-SS-0.0-0.5	Aroclor-1254	69	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE079	SL-324-SA5B-SS-0.0-0.5	Aroclor-1254	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C3b **VALIDATION COMPLETENESS WORKSHEET** Date: 7-12-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: KT
2nd Reviewer: C

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: 2/9/11
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	%RSD≤20
IV.	Continuing calibration/ICV	A	ICV/CCV≤20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW A	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 and reported CRQLs	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	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: ALL SOIL

1 5	SL-314-SA5B-SS-0.0-0.5	11		21		31	11046014A-BLK
2 6	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3 9	SL-319-SA5B-SS-0.0-0.5	13		23		33	
4 11	SL-323-SA5B-SS-0.0-0.5	14		24		34	
5 12	SL-324-SA5B-SS-0.0-0.5	15		25		35	
6 14	SL-326-SA5B-SS-0.0-0.5	16		26		36	
7 15	SL-328-SA5B-SB-3.5-4.5	17		27		37	
8	#1 MS	18		28		38	
9	√ MSD	19		29		39	
10		20		30		40	

22

Notes:

LDC #: 25764C36
SDG #: See Cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: VA
2nd Reviewer:

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ____%D or ____%R				
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?			✓	
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?			✓	
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20% or percent recovieries 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?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up 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) of one or more surrogates was 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				

LDC #: 25764C3b
SDG #: See cover

VALIDATION FINDINGS CHECKLIST

Reviewer: LM
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
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?	NA	/		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
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, dry weight factors, and clean-up activities 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. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 5442
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. 5432
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. 5460
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

C #: 25764C35
G #: —

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: [illegible]
2nd Reviewer: [illegible]

THOD: ✓ GC ___ HPLC

ase see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
'N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?
N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

vel IV/D Only
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
	110460014A-LCS/D	II	57 (75-125)	( )	( )	All	J/UJ/P (4) (and II-KK)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )	

LDC #: 25764C5D
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: VR
2nd Reviewer: [illegible]

METHOD: X 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?
Y N N/A Did the percent difference of detected compounds between two columns./detectors ≤40%?
If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD/%D Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	Aroclor 1254	5	69	J dets/A (& ETU)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25764C3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: VV
2nd Reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported CF (initial)	Recalculated CF (intial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/21/11	BB (R) (Peak 1)	53	53	52	52	4.8	4.8
			↓ (R2) (Peak 1)	321	321	321	321	6.8	6.8
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 #: 25764C3b
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: M
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount (ng)
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount (ng)

Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported CF/Conc CCV	Recalculated CF/Conc CCV	Reported %D	Recalculated %D
		See TAL					

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 #: 45 TOP 3K
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: KT
2nd reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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: 7

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene	B	1.04	1.00	96	96	0
Tetrachloro-m-xylene						
Decachlorobiphenyl	A	1.04	0.983	94	94	0
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes:

LDC #: 27676279
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: IAM
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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: 8/9

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.
Gamma-BHC											
4,4'-DDT											
Aroclor 1260	16.67	16.67	ND	13.18	12.94	79	79	78	78	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 #: 25764C3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: MK
2nd Reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = I LCS - LCSD I * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1104600147-LCSD

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.
gamma-BHC										
4,4'-DDT										
Aroclor 1260	16.67	16.n/a	14.70	n/a	88	88				

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 #: 25764B5
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: VT
2nd reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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?

Example:

Sample I.D. 2 BB :

Conc. = $\frac{(1990.81)(2mL)(1x)}{103 \quad (6g)}$

= 2.644 (+ 0.91 + 0.58)
Peak4

÷3 = BB_{total} = 0.711

$\frac{0.711}{(.937)\%S} = 0.76$ µg/kg ✓

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5
SL-328-SA5B-SB-3.5-4.5
SL-314-SA5B-SS-0.0-0.5MS
SL-314-SA5B-SS-0.0-0.5MSD
SL-314-SA5B-SS-0.0-0.5DUP

Introduction

This data review covers 10 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010B, 6020, and 7471A for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, 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.

N Presumptive evidence of presence of the constituent.

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)	Copper Lead Phosphorus Tin	0.247 mg/Kg 0.019 mg/Kg 0.627 mg/Kg 1.389 mg/Kg	All samples in SDG DE079
ICB/CCB	Beryllium Lithium Zirconium	0.074 ug/L 5.1 ug/L 5.7 ug/L	All samples in SDG DE079

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-314-SA5B-SS-0.0-0.5	Tin	2.3 mg/Kg	2.3U mg/Kg
SL-316-SA5B-SB-4.5-5.5	Tin Zirconium	2.6 mg/Kg 2.5 mg/Kg	2.6U mg/Kg 2.5U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-319-SA5B-SS-0.0-0.5	Tin Zirconium	2.2 mg/Kg 2.7 mg/Kg	2.2U mg/Kg 2.7U mg/Kg
SL-323-SA5B-SS-0.0-0.5	Tin Zirconium	2.5 mg/Kg 2.4 mg/Kg	2.5U mg/Kg 2.4U mg/Kg
SL-324-SA5B-SS-0.0-0.5	Tin	2.0 mg/Kg	2.0U mg/Kg
SL-326-SA5B-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-328-SA5B-SB-3.5-4.5	Tin Zirconium	2.7 mg/Kg 1.4 mg/Kg	2.7U mg/Kg 1.4U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met with the following exceptions:

ICS ID	Date/ Time	Analyte	Concentration (Limits)	Associated Samples	Flag	A or P
ICSA	2/14/11 16:13, 17:41	Boron Zirconium	-15 ug/L (≤8.9) -9 ug/L (≤8.4)	SL-316-SA5B-SB-4.5-5.5 SL-323-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

Samples were qualified as estimated (J/UJ) if the interferent concentrations in the samples were greater than ninety percent of the spiked interferent concentrations in the ICSA.

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-314-SA5B-SS-0.0-0.5MS/MSD (All samples in SDG DE079)	Antimony	52 (75-125)	52 (75-125)	-	J (all detects) UJ (all non-detects)	A
	Vanadium	-	45 (75-125)	-	J (all detects) UJ (all non-detects)	
SL-314-SA5B-SS-0.0-0.5MS/MSD (All samples in SDG DE079)	Chromium	166 (75-125)	-	-	J (all detects)	A
	Lead	129 (75-125)	-	-	J (all detects)	
	Potassium	127 (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-314-SA5B-SS-0.0-0.5DUP (All samples in SDG DE079)	Barium	138 (≤20)	-	J (all detects) UJ (all non-detects)	A
	Calcium	57 (≤20)	-		
	Cobalt	25 (≤20)	-		
	Lead	22 (≤20)	-		
	Molybdenum	41 (≤20)	-		
	Phosphorus	46 (≤20)	-		

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) 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-314-SA5B-SS-0.0-0.5	Barium Chromium Nickel	11 (≤10) 11 (≤10) 12 (≤10)	All samples in SDG DE079	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE079

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-323-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Boron Zirconium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	ICP interference check sample analysis (%R) (I)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Antimony Vanadium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Chromium Lead Potassium	J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Barium Calcium Cobalt Lead Molybdenum Phosphorus	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	Barium Chromium Nickel	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	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 DE079

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE079	SL-314-SA5B-SS-0.0-0.5	Tin	2.3U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE079	SL-316-SA5B-SB-4.5-5.5	Tin Zirconium	2.6U mg/Kg 2.5U mg/Kg	A	B
DE079	SL-319-SA5B-SS-0.0-0.5	Tin Zirconium	2.2U mg/Kg 2.7U mg/Kg	A	B
DE079	SL-323-SA5B-SS-0.0-0.5	Tin Zirconium	2.5U mg/Kg 2.4U mg/Kg	A	B
DE079	SL-324-SA5B-SS-0.0-0.5	Tin	2.0U mg/Kg	A	B
DE079	SL-326-SA5B-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE079	SL-328-SA5B-SB-3.5-4.5	Tin Zirconium	2.7U mg/Kg 1.4U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11

SDG #: DE079 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories 7471A Reviewer: MG

2nd Reviewer: ✓

METHOD: Metals (EPA SW 846 Method 6010B/6020~~A/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	A	Sampling dates: 2-9-11
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/MSD
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
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: all soil

1	SL-314-SA5B-SS-0.0-0.5	11		21		31	
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-319-SA5B-SS-0.0-0.5	13		23		33	
4	SL-323-SA5B-SS-0.0-0.5	14		24		34	
5	SL-324-SA5B-SS-0.0-0.5	15		25		35	
6	SL-326-SA5B-SS-0.0-0.5	16		26		36	
7	SL-328-SA5B-SB-3.5-4.5	17		27		37	
8	SL-314-SA5B-SS-0.0-0.5 MS	18		28		38	
9	SL-314-SA5B-SS-0.0-0.5 MSD	19		29		39	
10	SL-314-SA5B-SS-0.0-0.5 DUP	20	PBS	30		40	

Notes: _____

DC #: 25764C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer:

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?	✓			

LDC #: 25764C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: ✓

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 #: 25764C4
SDG #: —

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: MG
2nd reviewer: V

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1→7	S	(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B) Si, ___
QC 8→10	↓	(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B) Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
1→7	S	Nb, Pd, (P), Pt, (Sn, Sr, Ti), W, U, (Li), S, (Zr), ___
QC 8→10	↓	Nb, Pd, (P), Pt, (Sn, Sr, Ti), W, U, (Li), S, (Zr), ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
Analysis Method		
ICP	S	(Li), S, (Al, B, Ca, Fe, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr)
ICP-MS	↓	Al, (Sb, As, Ba, Be, Cd), Ca, (Cr, Co, Cu), Fe, (Pb), Mg, Mn, (Ni), K, (Se, Ag), Na, (Tl, V, Zn, Mo), B, Si, ___
ICP-MS		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Zr, ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN

Comments: (Mercury by CVAA if performed)
Nb: Niobium, Pd: Palladium, P: Phosphorus, Pt: Platinum, S: Sulfur, W: Tungsten, U: Uranium, Zr: Zirconium

LDC #: 25764C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/kg

Soil preparation factor applied: 100x , ICP-MS 2x dil code B
Associated Samples: all

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			
Be			0.074	0.074										
Cu	0.247			1.235										
Li			5.1	2.55										
Pb	0.019			0.095										
P	0.627			3.135										
Sn	1.389			6.945	2.3	2.6	2.2	2.5	2.0	3.0	2.7			
Zr			5.7	2.85		2.5	2.7	2.4			1.4			

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 #: 25764CH

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: MG
2nd Reviewer: L

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	ICSA (≤ MDL) (µg/L) Finding	Associated Samples	Qualifications
1	2-14-11	ICSA (16:13, 17:41)	B	-15 (8.9)	2	J/UJ/A (I)
			Li	-18 (2.2)		No Qual
			Mn	4 (0.78)		
			Sr	3 (0.62)		
			Zr	-9 (8.4)		J/UJ/A (I)
2		ICSA (16:13, 17:41)	B	-15 (8.9)	4	J/UJ/A (I)
			Li	-18 (2.2)		No Qual
			Mn	4 (0.78)		
			Sr	3 (0.62)		
			Zr	-9 (8.4)		J/UJ/A (I)
3		ICSA (16:13, 17:41)	B	-15 (8.9)	7	J/UJ/A (I)
			Li	-18 (2.2)		No Qual
			Mn	4 (0.78)		
			Sr	3 (0.62)		
			Zr	-9 (8.4)		J/UJ/A (I)

Comments: Fe > 90% ICSA

LDC #: 25764C4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: MG
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 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
1	8/9	soil	Sb	52 (75-125)	52 (75-125)		all	J/UJ/A (Q)
			Cr	166 (				J dets/A
			Pb	129 (				
			K	127 (				
			V		45 (			J/UJ/A

Comments:

LDC #: 25764C4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: MG
2nd Reviewer: MV

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
1		10	Soil	Ba	138 (≤ 20)		all	J/UJ/A (E)
		↓	↓	Ca	57 ( )		↓	↓ ↓
				Co	25 ( )			
				Pb	22 ( )			
				Mo	41 ( )			
				P	46 (↓)			

Comments: _____

DUP.4SW

LDC #: 25764C4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Reviewer: MG
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 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
1		1	soil	Ba	11 (≤10)	all	J/UJ/A (A)
		↓	↓	Cr	11 (↓)	↓	↓
				Ni	12 (↓)		

Comments:

LDC #: 25764C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: MG
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 x 100 / True

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)
1602 ICV	ICP (Initial calibration)	Mn	583.69	600.0	97.3	97.3	Y
1849 ICV	ICP/MS (Initial calibration)	V	542.30	500.0	108.5	108.5	
0953 ICV	CVAA (Initial calibration)	Hg	2.500	2.5	100.0	100.0	
1624 CCV1	ICP (Continuing calibration)	Sr	485.33	500.0	97.1	97.1	
1904 CCV1	ICP/MS (Continuing calibration)	Cd	24.32	25.0	97.3	97.3	
1025 CCV3	CVAA (Continuing calibration)	Hg	0.998	1.00	99.8	100.0	
	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 #: 25764C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Page: 1 of 1
Reviewer: MG
2nd Reviewer: ~

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)
1901 ICSAB1	ICP interference check	Co	21.06 (µg/L)	20. (µg/L)	105.3	105.5	Y
1913 LCS	Laboratory control sample	As	110.75 (mg/kg)	107.0 (mg/kg)	104	104	
1926 8	Matrix spike	Cr	(SSR-SR) 18.03 (mg/kg)	10.5988 (mg/kg)	170	166	
1643 / 1650 10	Duplicate	P	789.1 (mg/kg)	493.4 (mg/kg)	46	46	
1916 / 1932 1	ICP serial dilution	Ni	57.92 (µg/L)	64.70 (µg/L)	12	12	

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 #: 25764C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 2
Reviewer: MG
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 #1, P 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:

$$\frac{(7.29935\ mg/L)(0.100\ L)}{(0.00100\ kg)(0.925)} = 789.12\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1	Al	13600	13600	Y
		Sb	0.14	0.14	
		As	4.4	4.4	
		Ba	413	413	
		Be	0.33	0.33	
		B	2.2	2.2	
		Cd	0.14	0.14	
		Ca	7740	7740	
		Cr	21.0	21.0	
		Co	6.9	6.9	
		Cu	8.6	8.6	
		Fe	16500	16500	
		Pb	3.8	3.8	
		Li	14.2	14.2	
		Mg	3510	3510	
		Mn	225	225	
		Mo	1.7	1.7	
		Ni	12.4	12.4	
		P	789	789	
		K	2160	2160	

Note:

LDC #: 25764C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 2 of 2
Reviewer: MG
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 # 1, Zn 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:

$$\frac{(236.200\ \mu g/L)(0.100\ L)(2)}{(1.01\ g)(0.925)} = 50.56\ \mu g/g \text{ or } mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1 cont'd	Se	0.21	0.21	Y
		Ag	0.027	0.027	
		Na	126	126	
		Sr	39.9	39.9	
		Tl	0.21	0.21	
		Sn	2.3	2.3	
		Ti	949	949	
		V	41.4	41.4	
		Zn	50.6	50.6	
		Zr	3.7	3.7	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Herbicides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5

Introduction

This data review covers 5 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8151A for Herbicides.

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.

N Presumptive evidence of presence of the constituent.

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 this 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 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 herbicide contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound	Concentration	Associated Samples
110450011A-BLK	2/15/11	MCPP	88 ug/Kg	SL-323-SA5B-SS-0.0-0.5

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.

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) Duplicate

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.

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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

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-323-SA5B-SS-0.0-0.5	2,4-DB	58	J (all detects)	A
SL-324-SA5B-SS-0.0-0.5	2,4-DB	82	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE079	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
Herbicides - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5	2,4-DB	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C5 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: VM
2nd Reviewer:

METHOD: GC Herbicides (EPA SW 846 Method 8151A)

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: 2/9/11
II	Initial calibration	A	%RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: ALL SOIL

1	SL-314-SA5B-SS-0.0-0.5	11		21		31	1104300111A-BLK
2	SL-319-SA5B-SS-0.0-0.5	12		22		32	110520023A-BLK
3	SL-323-SA5B-SS-0.0-0.5	13		23		33	
4	SL-324-SA5B-SS-0.0-0.5	14		24		34	
5	SL-326-SA5B-SS-0.0-0.5	15		25		35	
6		16		26		36	
7		17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes:

LDC #: 03761C

VALIDATION FINDINGS CHECKLIST

Reviewer: MT
2nd Reviewer: A

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 25469C

VALIDATION FINDINGS CHECKLIST

Reviewer: MK
2nd Reviewer: AV

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		/		
Were the performance evaluation (PE) samples within the acceptance limits?			/	
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: X 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 #: 25764C5
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: MT
2nd Reviewer: [illegible]

METHOD: X 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.

"B"

Level IV/B 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?

Blank extraction date: 2/15/11 **Blank analysis date:** 2/16/11 **Associated samples:** 3 (MD)
Conc. units: ug/kg

Compound	Blank ID	Sample Identification						
	1104500 11A-BLK							
MCPP	88							

Blank extraction date: ___ **Blank analysis date:** ___ **Associated samples:** ___
Conc. units: ___

Compound	Blank ID	Sample Identification						

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 #: 25764C5
SDG #: Egg Cover

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: MT
2nd Reviewer: A

METHOD: X 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?
Y N N/A Did the percent difference of detected compounds between two columns./detectors ≤40%?
If no, please see findings bellow.

#	Compound Name	Sample ID	%RPD/%D Between Two Columns/Detectors Limit (≤ 40%)	Qualifications
	~~E~~ B	3	56	J dets/A (* IV)
	B	4	82	J dets/A (* IV)

Comments: See sample calculation verification worksheet for recalculations

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: KF
2nd Reviewer: [signature]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (200.0 std)	Recalculated CF (200.0 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	IFB	2/10/11	A (Cl A)	.133	.133	.130	.130	11.1	11.1
			E ↓	.359	.359	.387	.387	19.1	19.1
			A (Cl B)	.145	.145	.142	.142	13.6	13.6
2			BE ↓	~~.328~~ .0838	.0838	~~.354~~ .0844	.0844	11.8	11.8
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: LM
2nd Reviewer:

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	3L1504L.05R	2/15/11	A (ClA)	200.60	211.63	211.63	5.5	5.5
			E ↓	100.70	99.57	99.57	1.1	1.1
			A (ClB)	200.60	202.85	202.85	1.1	1.1
2			B ↓	200.60	198.61	198.61	1.0	1.0
	3L1509L.16R	2/15/11	A (ClA)	200.60	210.32	210.32	4.8	4.8
			E ↓	100.70	96.33	96.33	4.3	4.3
3			A (ClB)	200.60	203.85	203.85	1.6	1.6
			B ↓	200.60	198.63	198.63	1.0	1.0
	3L1509L.28R	2/16/11	A (ClA)	200.60	214.96	214.96	7.2	7.2
4			E ↓	100.70	93.35	93.35	7.3	7.3
			A (ClB)	200.60	202.70	202.70	1.0	1.0
			B ↓	200.60	192.31	192.31	4.1	4.1

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 #: 25764K5
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: WF
2nd Reviewer:

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	6H15041.05R	2/22/11	A (CLA)	200.60	207.77	207.74	3.6	3.6
			E ↓	100.70	98.69	98.69	2.0	2.0
			A (CLB)	200.60	200.20	200.20	0.2	0.2
2			B ↓	200.60	193.61	193.61	3.5	3.5
	6H15041.17R	2/22/11	A (CLA)	200.60	215.55	215.55	7.5	7.5
3			G ↓	100.70	94.19	94.19	6.5	6.5
			A (CLB)	200.60	202.72	202.72	1.1	1.1
			B ↓	200.60	195.51	195.51	2.5	2.5
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.

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: TM

2nd reviewer: [illegible]

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: 3

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
DCAA	B	6.67	8.012486	121	121	0

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: ___

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: ___

LDC #: _____

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: MT
2nd Reviewer:

METHOD: X GC __HPLC

The percent recoveries (%R) and relative percent differences (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 =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1104500118-LCS

Compound	Spike Added (ug/kg)		Spike 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)	8.33	n/a	7.35	n/a	88	88				
Dinoseb (8151)	14.2	n/a	1.88	n/a	13	13				
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 #: 25764C5

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: M
2nd Reviewer: A

METHOD: X 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. 3 Compound Name B

Concentration = $\frac{(12677)(2mL)(1x)(100)}{(.0844)(60.3g)(.955)(156987)}$

= 3.3 ug/kg

#	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: February 9, 2011

LDC Report Date: July 13, 2011

Matrix: Soil

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory, Area IV: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-319-SA5B-SS-0.0-0.5
SL-323-SA5B-SS-0.0-0.5
SL-324-SA5B-SS-0.0-0.5
SL-326-SA5B-SS-0.0-0.5
SL-328-SA5B-SB-3.5-4.5
SL-314-SA5B-SS-0.0-0.5MS
SL-314-SA5B-SS-0.0-0.5DUP
SL-324-SA5B-SS-0.0-0.5MS
SL-324-SA5B-SS-0.0-0.5DUP

Introduction

This data review covers 11 soil samples 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, EPA SW 846 Method 9045C for pH, 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, Area IV 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, Area IV 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.

N Presumptive evidence of presence of the constituent.

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

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.

No field blanks were identified in this SDG.

V. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

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 DE079	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE079

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-319-SA5B-SS-0.0-0.5 SL-323-SA5B-SS-0.0-0.5 SL-324-SA5B-SS-0.0-0.5 SL-326-SA5B-SS-0.0-0.5 SL-328-SA5B-SB-3.5-4.5	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 DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C6

SDG #: DE079

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 7-11-11

Page: 1 of 1

Reviewer: MG

2nd Reviewer:

9M.

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), ~~Oxidation-Reduction Potential (ASTM D1498)~~, pH (EPA Method ~~150.1~~/EPA SW846 Method 9045C) Perchlorate (EPA Meth. 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	A	Sampling dates: 2-9-11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	A	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	N	
X	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: all soil

1	SL-314-SA5B-SS-0.0-0.5	11	SL-314-SA5B-SS-0.0-0.5 DUP	21		31	
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-319-SA5B-SS-0.0-0.5	13		23		33	
4	SL-323-SA5B-SS-0.0-0.5	14		24		34	
5	SL-324-SA5B-SS-0.0-0.5	15		25		35	
6	SL-326-SA5B-SS-0.0-0.5	16		26		36	
7	SL-328-SA5B-SB-3.5-4.5	17		27		37	
8	SL-324-SA5B-SS-0.0-0.5 MS	18		28		38	
9	SL-314-SA5B-SS-0.0-0.5 MS	19		29		39	
10	SL-324-SA5B-SS-0.0-0.5 DUP	20		30	PBS	40	

Notes:

LDC #: 25764C6

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: W

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 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% (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?			✓	

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.			✓	

LDC #: 25764C6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Page: 1 of 1
Reviewer: MG
2nd reviewer:

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1, 2, 7	S	(pH) TDS Cl (F) (NO3) NO2 SO4 PO4 ALK (CN) NH3 TKN TOC (CR6+) (ClO4)
3 → 6	↓	(pH) TDS Cl (F) NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC (CR6+) (ClO4)
QC 8, 910	↓	pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC (CR6+) ClO4
9Ø	↓	pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ (ClO4)
11	↓	(pH) TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ (ClO4)
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4
		pH TDS Cl F NO3 NO2 SO4 PO4 ALK CN NH3 TKN TOC CR6+ ClO4

Comments:

LDC #: 25764C6

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: MG
2nd Reviewer:

METHOD: Inorganics, Method see cover

The correlation coefficient (r) for the calibration of CN was recalculated. Calibration date: 2-15-11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of Analysis	Analyte	Standard ID	Volts Found (units)	Conc True (units)	Recalculated r or %R	Reported r or %R	Acceptable (Y/N)
Initial calibration	CN	Blank	0.3874	0.01 (mg/L)	r=0.99982	r=0.99982	Y
		Standard 1	0.4627	0.02 ( )			
		Standard 2	0.7047	0.05 ( )			
		Standard 3	1.0865	0.10 ( )			
		Standard 4	1.8022	0.20 ( )			
		Standard 5	2.9997	0.35 ( )			
		Standard 6	-	-			
		Standard 7	-	-			
Calibration verification	~~NO3-N~~	1746 CCV3	1.473 (mg/L)	1.5 (mg/L)	98	98	
Calibration verification	F	1746 CCV3	1.445 (mg/L)	1.5 (mg/L)	96	96	
Calibration verification	Cr VI	1410 CCV2	205.21 (µg/L)	200. (µg/L)	103	103	

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 #: 25764C6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: MG
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 = Found / True x 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 = |S-D| / (S+D)/2 x 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)
1943 LCS	Laboratory control sample	F	9.955 (mg/kg)	10 (mg/kg)	100	not reported	Y
2146 9	Matrix spike sample	ClO4	(SSR-SR) 495.1 (ug/kg)	500 (ug/kg)	99	99	↓
1717 / 1813 10	Duplicate sample	Cr VI	0.218 (mg/kg)	0.484 (mg/kg)	76	76	↓

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 #: 25764C6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MG
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 #1, F reported with a positive detect were recalculated and verified using the following equation:

Concentration =

$y = mx + b$
where $m = 0.3486$
$b = 0.0154$

Recalculation:

$0.114 = 0.3486(x) + 0.0154$
$0.2828\ mg/L = x$

then $\frac{(0.2828\ mg/L)(0.050\ L)}{(0.00497\ Kg)(0.925)} = 3.076\ mg/Kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1	F	3.1	3.1	Y
		pH	6.84 (pH unit)	6.84 (pH unit)	↓

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	February 9, 2011
LDC Report Date:	July 12, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE079

Sample Identification

SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5
TB-020911

Introduction

This data review covers 2 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.

N Presumptive evidence of presence of the constituent.

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-020911 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

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

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.

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 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 DE079	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
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5 TB-020911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C7 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: KF
2nd Reviewer:

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: 2/9/11
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	N	Client Specified
VII.	Laboratory control samples	A	LCSD
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB=3

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-316-SA5B-SB-4.5-5.5 S	11		21		31	110354340-BLK S
2	SL-328-SA5B-SB-3.5-4.5 S	12		22		32	110428280-BLK 6
3	TB-020911 6	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:

LDC #: 42701CT

VALIDATION FINDINGS CHECKLIST

Reviewer: VF
2nd Reviewer: A

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ___ %D or ___ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 25767C4

VALIDATION FINDINGS CHECKLIST

Reviewer: LAT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: WT
2nd Reviewer:

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (118/220 std)	Recalculated CF (40/220 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/19/10	GRO	7676	7676	8050	8050	5.2	5.2
	ICAL	11/29/10	GRO	35486	35488	37329	37329	12.7	12.7
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC 7 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	200420009	2/11/11	GRO	550.00	578.42	578.42	5.2	5.2
	340358.0016	2/10/11	GRO	220.00	201.33	201.33	8.5	8.5
2								
	340358.0026	2/14/11	GRO	220.00	198.91	198.91	9.6	9.6
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.

Surrogate Results Verification

Reviewer: M
2nd reviewer: C

METHOD: X 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	Detector Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TFT	FID	831	697.39	83	83	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #: 22516C7

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: MM
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 11035A34A-LCS/D

Compound	Spike Added (mg/kg)		Spike 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	11	7.62	7.58	69	69	69	69	1	1
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 #: 15764

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: VV
2nd Reviewer: A

METHOD: X 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. ALL Compound Name GRO

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:	February 9, 2011
LDC Report Date:	July 12, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 3 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.

N Presumptive evidence of presence of the constituent.

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.

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

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.

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 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 DE079	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
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C8 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: M
2nd Reviewer:

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: 2/9/11
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	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: ALL SOIL

1	SL-314-SA5B-SS-0.0-0.5	11		21		31	1104100194-BLK
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	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:

LDC #: 42764C8

VALIDATION FINDINGS CHECKLIST

Reviewer: VK
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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 2576Y8

VALIDATION FINDINGS CHECKLIST

Reviewer: WF
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25101C0
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: MA
2nd Reviewer: A

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (288std)	Recalculated CF (288std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/2/11	C8-C40	15068	15068	15498	15498	4.9	4.9
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 #: 20401C0

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]

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 belo 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	J046.42	2/17/11	C8-C40	287.98	291.82	291.82	1.3	1.3
	J046.68	2/17/11	C8-C40	479.96	515.67	515.67	7.4	7.4
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.

DC #: 29 V C P 0

Surrogate Results Verification

Reviewer: M
2nd reviewer: C

METHOD: X 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	Detector Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
chlorobenzene	FID	1.0	0.7477	75	75	0
O-Terphenyl	FID	1.0	0.899	90	90	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: _____

LDC #: [illegible]

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: MS
2nd Reviewer: [illegible]

METHOD: ☒ GC ☐ HPLC

The percent recoveries (%R) and relative percent differences (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 =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1104100191A-LCS

Compound	Spike Added (mg/kg)		Spike 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~~ C8-C11 (8015)	0.84	n/a	0.57	n/a	68	68				
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 #: 257648

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

X 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 = $\frac{(14356529)\ (1mL)\ (1x)}{(15498)\ (60g)\ (.925)}$

= 16.7 mg/kg ✓

#	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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 3 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Flag	A or P
110460005A-LCS/D (All samples in SDG DE079)	Nitrobenzene	122 (80-120)	-	-	J (all detects)	P
	2,4,6-Trinitrotoluene	121 (80-120)	-	-	J (all detects)	
	2-Amino-4,6-dinitrotoluene	123 (80-120)	-	-	J (all detects)	
	2,6-Dinitrotoluene	121 (80-120)	-	-	J (all detects)	
	PETN	126 (80-120)	-	-	J (all detects)	

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. 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 DE079	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
Explosives - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	Nitrobenzene 2,4,6-Trinitrotoluene 2-Amino-4,6-dinitrotoluene 2,6-Dinitrotoluene PETN	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C40 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: LF
2nd Reviewer: A

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: 2/9/11
II	Initial calibration	A	%RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	SW	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: ALL SOIL

1	SL-314-SA5B-SS-0.0-0.5	11		21		31	I104600005A-BLK
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	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:

LDC #: [illegible]

VALIDATION FINDINGS CHECKLIST

Reviewer:
2nd Reviewer:

Method: ____ GC __X__ 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
X. Regional Quality Assurance and Quality Control				

LDC #: 42762L1V

VALIDATION FINDINGS CHECKLIST

Reviewer: VT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 __X__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: _____

SDG #: Fee Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: MT
2nd Reviewer: C

METHOD: __ GC X 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
	110460005A-LCS/D	F	122 (80-120)	( )	( )	ALL	J dets/p (L)
		G	121 (80-120)	( )	( )		
		I	123 (80-120)	( )	( )		
		K	121 (80-120)	( )	( )		
		RETN	126 (80-120)	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 26767C40
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: WA
2nd Reviewer: C

METHOD: GC_____HPLC X

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (500.5 std)	Recalculated CF (500.5 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	BAL	1/10/11	C (dbA)	191	191	194	194	3.6	3.6
			G	193	193	202	202	6.0	6.0
			C (dbB)	373	373	393	393	10.1	10.1
2			G	194	194	195	195	8.0	8.0
3			* dbB is confirmation only						
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 recalculatec results.

LDC #: 25764C40
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC_____HPLC X

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 CE(ical)/ CCV Conc	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	9E12010.07R	2/17/11	C (ClA)	500.50	495.25	495.25	1.0	1.0
			G ✓	500.50	473.15	473.15	5.5	5.5
2	9E12010.19R	2/18/11	C (ClA)	1001.00	996.02	996.02	0.5	0.5
			G ✓	1001.00	962.97	962.97	3.8	3.8
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.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: ___ GC _X_ 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: 3

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
2-NMX	A	2000	2492.37	125	125	0

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes: _____

LDC #: 20[illegible]

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: RT
2nd Reviewer: A

METHOD: ___ GC X HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1104L2005A-LCS

Compound	Spike Added (ug/Kg)		Spike 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)	2000.25	n/a	2194.29	n/a	110	110				
2,4,6-Trinitrotoluene (8330)	1999.2	n/a	2415.59	n/a	121	121				

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 #: 25764C4C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: VV
2nd Reviewer:

METHOD: __ GC X 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. ALL Compound Name ALL

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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Terphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 3 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.

N Presumptive evidence of presence of the constituent.

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 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.

VI. 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.

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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

The QAPP reporting limits (RL) were met with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG DE079	o-Terphenyl m-Terphenyl p-Terphenyl	Laboratory reporting limit reported at 3.5 mg/Kg.	Reporting limit should be reported at 0.167 mg/Kg per the QAPP.	None None None	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE079	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 DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	o-Terphenyl m-Terphenyl p-Terphenyl	None None None	P	Compound quantitation and CRQLs (*IX)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C41 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: TA
2nd Reviewer:

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: 2/9/11
II	Initial calibration	A	%RSD≤20
III.	Calibration verification/~~ICV~~	A	CCV≤20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: ALL Soil

1	SL-314-SA5B-SS-0.0-0.5	11		21		31	11/24/2018A-BLK
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	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:

LDC #: 21467C41

VALIDATION FINDINGS CHECKLIST

Reviewer: MK
2nd Reviewer: C

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 25764C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MA
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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.			✓	

SDG # See Cover

Compound Quantitation and Reported CRQLs

Reviewer: WAT
2nd Reviewer:

METHOD: X GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

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
	ALL	Lab RL's higher than QAPP. QAPP = 0.167 mg/kg lab = 3.5 mg/kg	ALL	TEXT (2)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 22767-11
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (16.172 std)	Recalculated CF (16.247 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/20/11	O-Terphenyl	2.55 E4	2.55 E4	2.54 E4	2.54 E4	0.8	0.8
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

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	2047.07R	2/16/11	O-Terphenyl	32.28	35.45	35.48	9.8	9.8
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.

Surrogate Results Verification

Page: 1 of 1
Reviewer: WJ
2nd reviewer: A

METHOD: X 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: 3

Surrogate	Detector/ Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
N-Triacontane	FID	0.333	0.389166	117	117	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: TM
2nd Reviewer: [signature]

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration
SA = Spike added
SC = Sample concentration
LCS = Laboratory Control Sample
LCSD = Laboratory Control Sample duplicate

RPD =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

LCS/LCSD samples: 110410018A - LCS

Compound	Spike Added (mg/kg)		Spike 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)										
O-Terphenyl	1.67	n/a	1.82	n/a	109	109				

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 #: 25764(4)

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: VR
2nd Reviewer: A

METHOD: X 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. ALL Compound Name ALL

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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 3 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 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 DE079	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
Alcohols - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C43 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/08/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JW
2nd Reviewer: A

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: 2/09/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	A	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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-314-SA5B-SS-0.0-0.5	11	PBLK1204Y	21		31	
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	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: _____

LDC #: 25764C43

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
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) of one or more surrogates was 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?	✓			
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				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25784C43

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/3/2011	Methanol	2.410	2.408	2.496	2.496	6.6	6.6
	H2739B								

C	A
5000	12041.56

Conc	Methanol
1000	2.780
2500	2.460
5000	2.410
10000	2.470
2.37	2.360
X=	2.496
S=	0.165

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 # 25168C43

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC____ HPLC____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0019	2/11/2011	Methanol	5000	5232.18	4807.29	3.9	3.9
	H2739B							

	Compound	Height	CF
CCV1	Methanol	11999	2.496

LDC #: 25764C43

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
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	
Acetone	Col. A	2500	2366.24	95	95	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 #: 25764C43

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 1204✓

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ mg/Kg (8015)	2500	NA	2337.86	NA	94	94				
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 #: 26764C93

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd Reviewer: C

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 ND

Concentration =_____

#	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: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 3 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.

N Presumptive evidence of presence of the constituent.

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%.

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 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	Compound	%D	Associated Samples	Flag	A or P
2/11/11	Propylene glycol Ethylene glycol Diethylene glycol	31.0 36.1 48.5	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	J (all detects) UJ (all non-detects)	A

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

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.

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 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 DE079	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
Glycols - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	Propylene glycol Ethylene glycol Diethylene glycol	J (all detects) UJ (all non-detects)	A	Calibration verification (%D) (C)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C45 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/26/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVL
2nd Reviewer: A

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: 2/09/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	SW	CCV/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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-314-SA5B-SS-0.0-0.5	11	PBLK01041	21		31	
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	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:

LDC #: 25764C45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: 2

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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓	NA		
Did the initial calibration meet the curve fit acceptance criteria?	✓		NA	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____%R	✓			
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	NA	✓		
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25764C45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25764 C45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: SW6
2nd Reviewer:

METHOD: ___ GC ___ HPLC

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 ___ %R
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 / %R validation criteria of ≤20.0% / 80-120%?
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 (Limit ≤ 20.0)	RT (limit)	Associated Samples	Qualifications
	2/11/11	F042.0027	ZB-Wax	A	31.8	( )	1-3	J/UJ/A (C)
				B	36.1	( )	↓	↓
				C	48.5	( )	↓	↓
						( )		
						( )		
						( )		
						( )		
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A = Propylene glycol
B = Ethylenerene
C = Diethylene ↓

LDC #: 25764 C45

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC _____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (201.694 std)	Recalculated (201.694 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/10/2011	Ethylene glycol	151.61	151.61	143.44	143.44	12.1	12.1
	H6612A								

C	H
201.694	30578.21

Conc	Ethylene glycol
10.085	117.26
50.423	129.23
100.847	142.65
201.694	151.61
302.540	158.43
504.234	161.47
X=	143.44
S=	17.346

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 # 25764C45

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0053	2/10/2011	Ethylene glycol	100.85	104.44	104.44	3.6	3.6
2	0022	2/11/2011	Ethylene glycol	100.85	64.43	64.42	36.1	36.1

	Compound	Height	CF
CCV1	Ethylene glycol	14981	143.44
CCV2	Ethylene glycol	9241	143.44

LDC #: 25764 C45

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
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: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	ZB-Wax	201.29	129.48	63	64	1

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 #: 25764 C4F

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS 0104 /

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ E. Glycol (8015)	205.03	NA	204.92	NA	100	100	←	←	←	←
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 #: 25764 c45

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: [signature]

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 ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: February 9, 2011

LDC Report Date: July 12, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5
SL-316-SA5B-SB-4.5-5.5
SL-328-SA5B-SB-3.5-4.5

Introduction

This data review covers 3 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 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 DE079	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
Formaldehyde - Data Qualification Summary - SDG DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5 SL-316-SA5B-SB-4.5-5.5 SL-328-SA5B-SB-3.5-4.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C71 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 2/9/11
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	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: All Soil

1	SL-314-SA5B-SS-0.0-0.5	11		21		31	1104500084-BLK
2	SL-316-SA5B-SB-4.5-5.5	12		22		32	
3	SL-328-SA5B-SB-3.5-4.5	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: _____

LDC #: 20701C47

VALIDATION FINDINGS CHECKLIST

Reviewer: LH
2nd Reviewer: C

Method: ____ GC X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 20167C77
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: KA
2nd Reviewer: C

METHOD: GC_____HPLC X

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (200 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	2/16/4	Formaldehyde	62.1	62.1	59.5	59.5	7.1	7.1
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: WA
2nd Reviewer: A

METHOD: GC _____ HPLC X

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified belo 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	IF4047-20R	2/16/14	Formaldehyde	199.00	200.772	200.772	0.9	0.9
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.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: ___ GC __X__ 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: B

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Butyraldehyde	A	4007.3	3686.714	92	92	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #: 2261-V1

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: VV
2nd Reviewer: C

METHOD: (N/A) GC (X) HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1104500058A-LCS

Compound	Spike Added (ug/kg)		Spike 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	n/a	7744.09	n/a	95	95				

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 #: 25764C74

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: GT
2nd Reviewer: A

METHOD: __ GC X HPLC

X 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. ALL Compound Name Formaldehyde

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:	February 9, 2011
LDC Report Date:	July 12, 2011
Matrix:	Soil
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE079

Sample Identification

SL-314-SA5B-SS-0.0-0.5

Introduction

This data review covers one soil sample 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.

N Presumptive evidence of presence of the constituent.

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 check is not required by the method.

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 30.0% 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 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 DE079	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 DE079

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE079	SL-314-SA5B-SS-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Perchlorate - Laboratory Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE079

No Sample Data Qualified in this SDG

LDC #: 25764C87 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/08/11
SDG #: DE079 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: VV
2nd Reviewer: A

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: 2/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 15/50 % LCDV = 30%.
V.	Blanks	A	
VI.	Surrogate spikes	N	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
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/CRQLs	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-314-SA5B-SS-0.0-0.5	11	Blank B	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	

DC #: 2564C87

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
2nd Reviewer:

Method: ~~Semivolatiles~~ clay (EPA SW 846 Method ~~8270C~~ 6850)

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 $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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 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 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 #: 25764C87

VALIDATION FINDINGS CHECKLIST

Reviewer: VV
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/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.			✓	

LDC # 25764 C87

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: DB
2nd Reviewer:

METHOD: EPA SW 846 Method 6850

Parameter: Perchlorate

Order of regression: Linear

Date	Instrument	Compound	Points	y area ratio	x conc ratio	RF
18-Feb-11	LCMS A5	Perchlorate	Point 1	0.020161	0.02	1.0081
			Point 2	0.042018	0.04	1.0505
			Point 3	0.099043	0.10	0.9904
			Point 4	0.213655	0.20	1.0683
			Point 5	0.422306	0.40	1.0558
			Point 6	1.056210	1.00	1.0562
			Point 7	2.645492	2.50	1.0582
						1.0411

Regression Output: Regression Output:		Reported WLR	
Constant	-0.00164	c =	-0.00160
Std Err of Y Est	0.04		
R Squared	0.99999	r^2 =	0.999999
No. of Observations	6.00		
Degrees of Freedom	4.00		
		m =	0.1059
X Coefficient(s)	1.05877		
Std Err of Coef.	0.01		

LDC # 25764C87

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD:LCMS Perchlorate (EPA SW 846 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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	ms5p04911010	2/18/2011	Perchlorate (CLO4-18)	4	4.150	4.151	3.8	3.8

	y=mx+b				
CCV1	Response(y)	m	b	Conc(x)	Final conc
CLO4	0.437886792	1.05877	-0.00164	0.4151	4.1513

LDC #: A 20 4 C6 /

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JM

2nd Reviewer: A

METHOD: GC/MS ~~BNA~~ ClO4 (EPA SW 846 Method ~~8270C~~ 6850)

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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS

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~~ ClO4	100	NA	102.0	NA	102	102				
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 #: 25764 C87

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JV
2nd reviewer: C

METHOD: GC/MS ~~BNA~~ CLP (EPA SW 846 Method ~~8270C~~ 6850)

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. _____, _____MD

Conc. = (_____)(_____)(_____)(_____)(_____)
(_____)(_____)(_____)(_____)(_____)

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE080

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-Feb-2011	TB-021011	6203561	TB	5030B	8015M	III
10-Feb-2011	TB-021011	6203561	TB	5030B	8260B	III
10-Feb-2011	TB-021011	6203561	TB	5030B	8260B SIM	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3050B	6010B	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3050B	6020	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3060A	7199	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3546	1625C	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3550B	8015B	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3550B	8015M	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3550B	8082	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3550B	8270C	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	3550B	8270C SIM	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	5035	8015M	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	5035	8260B	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	5035	8260B SIM	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	8330	8330A	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	Gen Prep	9045M	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	300.0	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	314.0	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	7471A	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	8015B	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	8015M	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	8315A	III
10-Feb-2011	SL-326-SA5B-SB-9.0-10.0	6203550	N	METHOD	9012B	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3050B	6010B	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	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-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3060A	7199	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3546	1625C	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3550B	8015B	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3550B	8015M	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3550B	8082	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3550B	8270C	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	3550B	8270C SIM	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	5035	8015M	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	5035	8260B	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	5035	8260B SIM	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	8330	8330A	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	Gen Prep	9045M	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	300.0	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	314.0	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	7471A	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	8015B	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	8015M	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	8315A	III
10-Feb-2011	SL-326-SA5B-SB-14.0-15	6203548	N	METHOD	9012B	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3050B	6010B	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3050B	6020	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3060A	7199	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3550B	8081A	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3550B	8082	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3550B	8151A	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	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
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	3550B	8270C SIM	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	Gen Prep	9045M	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	METHOD	300.0	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	METHOD	314.0	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	METHOD	6850	III
10-Feb-2011	SL-321-SA5B-SS-0.0-0.5	6203546	N	METHOD	7471A	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3050B	6010B	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3050B	6020	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3060A	7199	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3546	1625C	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3550B	8015B	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3550B	8015M	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3550B	8082	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3550B	8270C	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	3550B	8270C SIM	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	5035	8015M	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	5035	8260B	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	5035	8260B SIM	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	8330	8330A	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	Gen Prep	9045M	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	METHOD	300.0	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	METHOD	314.0	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	METHOD	7471A	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	METHOD	8015B	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	METHOD	8015M	III
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	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
10-Feb-2011	SL-326-SA5B-SB-18.5-19.5	6203549	N	METHOD	9012B	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3050B	6010B	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3050B	6020	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3060A	7199	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3550B	8081A	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3550B	8082	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3550B	8151A	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3550B	8270C	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	3550B	8270C SIM	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	Gen Prep	9045M	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	METHOD	300.0	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	METHOD	314.0	III
10-Feb-2011	SL-322-SA5B-SS-0.0-0.5	6203547	N	METHOD	7471A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3050B	6010B	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3050B	6020	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3060A	7199	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3546	1625C	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8015B	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8015M	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8081A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8082	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8151A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8270C	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	3550B	8270C SIM	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	8330	8330A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	Gen Prep	9045M	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	300.0	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	314.0	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	7471A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	8015B	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	8015M	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	8315A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5	6203551	N	METHOD	9012B	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5MSD	P203551M240959A	MSD	3550B	8081A	III
10-Feb-2011	SL-329-SA5B-SS-0.0-0.5MS	P203551R240931A	MS	3550B	8081A	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3050B	6010B	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3050B	6020	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3060A	7199	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3546	1625C	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8015B	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8015M	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8081A	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8082	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8151A	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8270C	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	3550B	8270C SIM	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	8330	8330A	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	Gen Prep	9045M	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	METHOD	300.0	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	METHOD	314.0	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	METHOD	7471A	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	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-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	METHOD	8015M	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	METHOD	8315A	III
10-Feb-2011	SL-330-SA5B-SS-0.0-0.5	6203552	N	METHOD	9012B	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3050B	6010B	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3050B	6020	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3060A	7199	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3546	1625C	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8015B	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8015M	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8081A	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8082	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8151A	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8270C	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	3550B	8270C SIM	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	8330	8330A	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	Gen Prep	9045M	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	300.0	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	314.0	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	7471A	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	8015B	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	8015M	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	8315A	III
10-Feb-2011	SL-331-SA5B-SS-0.0-0.5	6203553	N	METHOD	9012B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3050B	6010B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3050B	6020	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	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-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3546	1625C	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3550B	8015B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3550B	8015M	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3550B	8082	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3550B	8270C	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	3550B	8270C SIM	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	5035	8015M	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	5035	8260B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	5035	8260B SIM	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	8330	8330A	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	Gen Prep	9045M	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	300.0	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	314.0	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	7471A	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	8015B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	8015M	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	8315A	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0	6203543	N	METHOD	9012B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0DUP	P203543D271226A	DUP	METHOD	9012B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0MSD	P203543M320832A	MSD	3550B	8015B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0MS	P203543R271227A	MS	METHOD	9012B	III
10-Feb-2011	SL-315-SA5B-SB-3.0-4.0MS	P203543R320747A	MS	3550B	8015B	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3050B	6010B	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3050B	6020	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3060A	7199	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3550B	8081A	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-Feb-2011	DUP-024-QC-021011	6203541	FD	3550B	8082	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3550B	8151A	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3550B	8270C	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	3550B	8270C SIM	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	Gen Prep	9045M	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	METHOD	300.0	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	METHOD	314.0	III
10-Feb-2011	DUP-024-QC-021011	6203541	FD	METHOD	7471A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3050B	6010B	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3050B	6020	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3060A	7199	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3550B	8081A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3550B	8082	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3550B	8151A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3550B	8270C	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	3550B	8270C SIM	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	Gen Prep	9045M	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	METHOD	300.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	METHOD	314.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5	6203555	N	METHOD	7471A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3050B	6010B	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3050B	6020	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3060A	7199	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3550B	8081A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3550B	8082	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3550B	8151A	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-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3550B	8270C	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	3550B	8270C SIM	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	METHOD	300.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	METHOD	314.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	6203556	MS	METHOD	7471A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3050B	6010B	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3050B	6020	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3550B	8081A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3550B	8082	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3550B	8151A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3550B	8270C	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	3550B	8270C SIM	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MSD	6203557	MSD	METHOD	7471A	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	3050B	6010B	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	3050B	6020	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	3060A	7199	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	Gen Prep	9045M	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	METHOD	300.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	METHOD	314.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	6203558	DUP	METHOD	7471A	III
10-Feb-2011	DUP-024-QC-021011DUP	P203541D271709A	DUP	METHOD	314.0	III
10-Feb-2011	DUP-024-QC-021011DUP	P203541D291000A	DUP	Gen Prep	9045M	III
10-Feb-2011	DUP-024-QC-021011MS	P203541R271733A	MS	METHOD	314.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5DUP	P203555D271452B	DUP	METHOD	300.0	III
10-Feb-2011	SL-333-SA5B-SS-0.0-0.5MS	P203555R271507B	MS	METHOD	300.0	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	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
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3050B	6020	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3060A	7199	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3550B	8081A	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3550B	8082	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3550B	8151A	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3550B	8270C	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	3550B	8270C SIM	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	Gen Prep	9045M	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	METHOD	300.0	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	METHOD	314.0	III
10-Feb-2011	SL-335-SA5B-SS-0.0-0.5	6203560	N	METHOD	7471A	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3050B	6010B	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3050B	6020	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3060A	7199	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3550B	8081A	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3550B	8082	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3550B	8151A	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3550B	8270C	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	3550B	8270C SIM	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	Gen Prep	9045M	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	METHOD	300.0	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	METHOD	314.0	III
10-Feb-2011	SL-332-SA5B-SS-0.0-0.5	6203554	N	METHOD	7471A	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3050B	6010B	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3050B	6020	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3060A	7199	III

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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
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3550B	8081A	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3550B	8082	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3550B	8151A	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3550B	8270C	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	3550B	8270C SIM	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	Gen Prep	9045M	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	METHOD	300.0	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	METHOD	314.0	III
10-Feb-2011	SL-334-SA5B-SS-0.0-0.5	6203559	N	METHOD	7471A	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	3005A	6010B	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	3020A	6020	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	3510C	8081A	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	3510C	8082	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	3510C	8270C	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	3510C	8270C SIM	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	Gen Prep	300.0	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	Gen Prep	314.0	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	Gen Prep	7199	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	METHOD	7470A	III
10-Feb-2011	EB31-SA5B-021011	6203542	EB	METHOD	8151A	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3050B	6010B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3050B	6020	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3060A	7199	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3546	1625C	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3550B	8015B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3550B	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
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3550B	8082	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3550B	8270C	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	3550B	8270C SIM	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	5035	8015M	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	5035	8260B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	5035	8260B SIM	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	8330	8330A	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	Gen Prep	9045M	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	300.0	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	314.0	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	7471A	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	8015B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	8015M	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	8315A	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0	6203545	N	METHOD	9012B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0MSD	P203545M322126A	MSD	METHOD	8015B	III
10-Feb-2011	SL-319-SA5B-SB-4.0-5.0MS	P203545R322111A	MS	METHOD	8015B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-315-SA5B-SB-3.0-4.0 ***Collected:*** 2/10/2011 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
Nitrate-NO3	1.0	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-321-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 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
FLUORIDE	0.86	J	0.84	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP-024-QC-021011 ***Collected:*** 2/10/2011 1:05:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.44	J	0.936	MDL	5.26	PQL	mg/Kg	J	Z
MANGANESE	148		0.0820	MDL	0.526	PQL	mg/Kg	J	Q
POTASSIUM	1600		18.9	MDL	52.6	PQL	mg/Kg	J	Q
TIN	1.79	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-315-SA5B-SB-3.0-4.0 ***Collected:*** 2/10/2011 10:55:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.79	J	0.940	MDL	5.28	PQL	mg/Kg	J	Z
MANGANESE	249		0.0824	MDL	0.528	PQL	mg/Kg	J	Q
POTASSIUM	2830		19.0	MDL	52.8	PQL	mg/Kg	J	Q
TIN	2.63	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-319-SA5B-SB-4.0-5.0 ***Collected:*** 2/10/2011 3:27:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.87	J	0.935	MDL	5.25	PQL	mg/Kg	J	Z
MANGANESE	241		0.0820	MDL	0.525	PQL	mg/Kg	J	Q
POTASSIUM	2820		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	2.69	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.07	J	0.883	MDL	5.25	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-321-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 9:06:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	322		0.0824	MDL	0.528	PQL	mg/Kg	J	Q
POTASSIUM	2290		19.0	MDL	52.8	PQL	mg/Kg	J	Q
TIN	2.62	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.887	MDL	5.28	PQL	mg/Kg	J	Z

Sample ID: SL-322-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 9:25:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.94	J	0.904	MDL	5.08	PQL	mg/Kg	J	Z
MANGANESE	277		0.0792	MDL	0.508	PQL	mg/Kg	J	Q
POTASSIUM	2890		18.3	MDL	50.8	PQL	mg/Kg	J	Q
TIN	2.73	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.41	J	0.853	MDL	5.08	PQL	mg/Kg	U	B

Sample ID: SL-326-SA5B-SB-14.0-15 *Collected:* 2/10/2011 8:59:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.09	J	1.03	MDL	5.80	PQL	mg/Kg	J	Z
MANGANESE	281		0.0904	MDL	0.580	PQL	mg/Kg	J	Q
POTASSIUM	2570		20.9	MDL	58.0	PQL	mg/Kg	J	Q
TIN	2.88	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.85	J	0.974	MDL	5.80	PQL	mg/Kg	U	B

Sample ID: SL-326-SA5B-SB-18.5-19.5 *Collected:* 2/10/2011 9:09:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.67	J	0.968	MDL	5.44	PQL	mg/Kg	J	Z
MANGANESE	329		0.0849	MDL	0.544	PQL	mg/Kg	J	Q
POTASSIUM	2990		19.6	MDL	54.4	PQL	mg/Kg	J	Q
TIN	2.65	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.23	J	0.914	MDL	5.44	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-326-SA5B-SB-9.0-10.0 *Collected:* 2/10/2011 8:48:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.83	J	0.986	MDL	5.54	PQL	mg/Kg	J	Z
MANGANESE	193		0.0864	MDL	0.554	PQL	mg/Kg	J	Q
POTASSIUM	2210		19.9	MDL	55.4	PQL	mg/Kg	J	Q
TIN	2.01	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.96	J	0.930	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-329-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 9:48:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.02	J	0.926	MDL	5.20	PQL	mg/Kg	J	Z
MANGANESE	279		0.0812	MDL	0.520	PQL	mg/Kg	J	Q
POTASSIUM	2960		18.7	MDL	52.0	PQL	mg/Kg	J	Q
TIN	2.64	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.25	J	0.874	MDL	5.20	PQL	mg/Kg	U	B

Sample ID: SL-330-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 10:08:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.01	J	0.891	MDL	5.01	PQL	mg/Kg	J	Z
MANGANESE	233		0.0781	MDL	0.501	PQL	mg/Kg	J	Q
POTASSIUM	2760		18.0	MDL	50.1	PQL	mg/Kg	J	Q
TIN	2.58	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	2.67	J	0.841	MDL	5.01	PQL	mg/Kg	J	Z

Sample ID: SL-331-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 10:35:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.69	J	0.918	MDL	5.15	PQL	mg/Kg	J	Z
MANGANESE	283		0.0804	MDL	0.515	PQL	mg/Kg	J	Q
POTASSIUM	2890		18.6	MDL	51.5	PQL	mg/Kg	J	Q
TIN	2.57	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.28	J	0.866	MDL	5.15	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-332-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 2:23:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.22	J	0.943	MDL	5.30	PQL	mg/Kg	J	Z
MANGANESE	180		0.0827	MDL	0.530	PQL	mg/Kg	J	Q
POTASSIUM	2090		19.1	MDL	53.0	PQL	mg/Kg	J	Q
TIN	2.77	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: **SL-333-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:05:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.48	J	0.917	MDL	5.15	PQL	mg/Kg	J	Z
MANGANESE	132		0.0804	MDL	0.515	PQL	mg/Kg	J	Q
POTASSIUM	1480		18.6	MDL	51.5	PQL	mg/Kg	J	Q
TIN	1.81	J	1.03	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: **SL-334-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 2:49:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.23	J	0.979	MDL	5.50	PQL	mg/Kg	J	Z
MANGANESE	237		0.0858	MDL	0.550	PQL	mg/Kg	J	Q
POTASSIUM	2480		19.8	MDL	55.0	PQL	mg/Kg	J	Q
TIN	4.79	J	1.10	MDL	11.0	PQL	mg/Kg	U	B

Sample ID: **SL-335-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.40	J	0.948	MDL	5.33	PQL	mg/Kg	J	Z
MANGANESE	190		0.0831	MDL	0.533	PQL	mg/Kg	J	Q
POTASSIUM	1860		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	1.78	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.04	J	0.895	MDL	5.33	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP-024-QC-021011 ***Collected:*** 2/10/2011 1:05:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0689	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: DUP-024-QC-021011 ***Collected:*** 2/10/2011 1:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.125	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	2.04		0.0833	MDL	0.417	PQL	mg/Kg	J	Q, E
CHROMIUM	9.70		0.125	MDL	0.417	PQL	mg/Kg	J	E
COBALT	3.70		0.0208	MDL	0.104	PQL	mg/Kg	J	A
COPPER	10.3		0.0688	MDL	0.417	PQL	mg/Kg	J	E
LEAD	3.70		0.0108	MDL	0.208	PQL	mg/Kg	J	E
NICKEL	5.64		0.104	MDL	0.417	PQL	mg/Kg	J	E
SILVER	0.0230	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
THALLIUM	0.0996	J	0.0313	MDL	0.104	PQL	mg/Kg	U	B
VANADIUM	34.8		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E, E
ZINC	91.4		0.583	MDL	3.13	PQL	mg/Kg	J	E

Sample ID: SL-315-SA5B-SB-3.0-4.0 ***Collected:*** 2/10/2011 10:55:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

Sample ID: SL-315-SA5B-SB-3.0-4.0 ***Collected:*** 2/10/2011 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0788	J	0.0640	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	6.02		0.0854	MDL	0.427	PQL	mg/Kg	J	Q, E
CHROMIUM	16.7		0.128	MDL	0.427	PQL	mg/Kg	J	E
COBALT	5.34		0.0213	MDL	0.107	PQL	mg/Kg	J	A
COPPER	7.62		0.0704	MDL	0.427	PQL	mg/Kg	J	E
LEAD	6.66		0.0111	MDL	0.213	PQL	mg/Kg	J	E
NICKEL	9.96		0.107	MDL	0.427	PQL	mg/Kg	J	E
SILVER	0.0695	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	34.3		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, E, E
ZINC	76.6		0.597	MDL	3.20	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-319-SA5B-SB-4.0-5.0** ***Collected:*** **2/10/2011 3:27:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: **SL-319-SA5B-SB-4.0-5.0** ***Collected:*** **2/10/2011 3:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0637	U	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q
ARSENIC	6.25		0.0849	MDL	0.424	PQL	mg/Kg	J	Q, E
CHROMIUM	17.3		0.127	MDL	0.424	PQL	mg/Kg	J	E
COBALT	5.87		0.0212	MDL	0.106	PQL	mg/Kg	J	A
COPPER	8.71		0.0700	MDL	0.424	PQL	mg/Kg	J	E
LEAD	6.78		0.0110	MDL	0.212	PQL	mg/Kg	J	E
NICKEL	11.2		0.106	MDL	0.424	PQL	mg/Kg	J	E
SILVER	0.0767	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	36.2		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E, E
ZINC	83.9		0.594	MDL	3.18	PQL	mg/Kg	J	E

Sample ID: **SL-321-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.182	J	0.0609	MDL	0.203	PQL	mg/Kg	J	Z, Q
ARSENIC	5.82		0.0812	MDL	0.406	PQL	mg/Kg	J	Q, E
CHROMIUM	19.5		0.122	MDL	0.406	PQL	mg/Kg	J	E
COBALT	5.29		0.0203	MDL	0.102	PQL	mg/Kg	J	A
COPPER	14.2		0.0670	MDL	0.406	PQL	mg/Kg	J	E
LEAD	10.3		0.0106	MDL	0.203	PQL	mg/Kg	J	E
NICKEL	13.1		0.102	MDL	0.406	PQL	mg/Kg	J	E
VANADIUM	37.6		0.0223	MDL	0.102	PQL	mg/Kg	J	Q, E, E
ZINC	87.2		0.569	MDL	3.05	PQL	mg/Kg	J	E

Sample ID: **SL-322-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:25:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.204	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-322-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.139	J	0.0634	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	5.41		0.0845	MDL	0.422	PQL	mg/Kg	J	Q, E
CHROMIUM	22.7		0.127	MDL	0.422	PQL	mg/Kg	J	E
COBALT	6.16		0.0211	MDL	0.106	PQL	mg/Kg	J	A
COPPER	10.1		0.0697	MDL	0.422	PQL	mg/Kg	J	E
LEAD	39.1		0.0110	MDL	0.211	PQL	mg/Kg	J	E
NICKEL	12.9		0.106	MDL	0.422	PQL	mg/Kg	J	E
SILVER	0.0637	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	40.4		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, E, E
ZINC	115		0.591	MDL	3.17	PQL	mg/Kg	J	E

Sample ID: **SL-326-SA5B-SB-14.0-15** ***Collected:*** **2/10/2011 8:59:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.102	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-14.0-15** ***Collected:*** **2/10/2011 8:59:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0696	MDL	0.232	PQL	mg/Kg	J	Z, Q
ARSENIC	5.07		0.0927	MDL	0.464	PQL	mg/Kg	J	Q, E
CHROMIUM	23.8		0.139	MDL	0.464	PQL	mg/Kg	J	E
COBALT	6.84		0.0232	MDL	0.116	PQL	mg/Kg	J	A
COPPER	9.44		0.0765	MDL	0.464	PQL	mg/Kg	J	E
LEAD	7.89		0.0121	MDL	0.232	PQL	mg/Kg	J	E
NICKEL	13.2		0.116	MDL	0.464	PQL	mg/Kg	J	E
SILVER	0.0403	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z
VANADIUM	44.2		0.0255	MDL	0.116	PQL	mg/Kg	J	Q, E, E
ZINC	63.4		0.649	MDL	3.48	PQL	mg/Kg	J	E

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0660	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0647	MDL	0.216	PQL	mg/Kg	J	Z, Q
ARSENIC	5.84		0.0862	MDL	0.431	PQL	mg/Kg	J	Q, E
CADMIUM	0.106	J	0.0431	MDL	0.108	PQL	mg/Kg	J	Z
CHROMIUM	16.4		0.129	MDL	0.431	PQL	mg/Kg	J	E
COBALT	6.02		0.0216	MDL	0.108	PQL	mg/Kg	J	A
COPPER	7.14		0.0711	MDL	0.431	PQL	mg/Kg	J	E
LEAD	6.45		0.0112	MDL	0.216	PQL	mg/Kg	J	E
NICKEL	9.59		0.108	MDL	0.431	PQL	mg/Kg	J	E
SILVER	0.0275	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z
VANADIUM	34.6		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, E, E
ZINC	124		0.603	MDL	3.23	PQL	mg/Kg	J	E

Sample ID: **SL-326-SA5B-SB-9.0-10.0** ***Collected:*** **2/10/2011 8:48:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.100	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-9.0-10.0** ***Collected:*** **2/10/2011 8:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q
ARSENIC	4.98		0.0886	MDL	0.443	PQL	mg/Kg	J	Q, E
CHROMIUM	15.0		0.133	MDL	0.443	PQL	mg/Kg	J	E
COBALT	5.59		0.0221	MDL	0.111	PQL	mg/Kg	J	A
COPPER	20.4		0.0731	MDL	0.443	PQL	mg/Kg	J	E
LEAD	10.8		0.0115	MDL	0.221	PQL	mg/Kg	J	E
NICKEL	12.7		0.111	MDL	0.443	PQL	mg/Kg	J	E
SILVER	0.0695	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	93.3		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E, E
ZINC	79.9		0.620	MDL	3.32	PQL	mg/Kg	J	E

Sample ID: **SL-329-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:48:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-329-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.116	J	0.0624	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	4.51		0.0833	MDL	0.416	PQL	mg/Kg	J	Q, E
CHROMIUM	19.4		0.125	MDL	0.416	PQL	mg/Kg	J	E
COBALT	5.22		0.0208	MDL	0.104	PQL	mg/Kg	J	A
COPPER	9.45		0.0687	MDL	0.416	PQL	mg/Kg	J	E
LEAD	5.34		0.0108	MDL	0.208	PQL	mg/Kg	J	E
NICKEL	10.2		0.104	MDL	0.416	PQL	mg/Kg	J	E
SILVER	0.0272	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	34.2		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E, E
ZINC	72.3		0.583	MDL	3.12	PQL	mg/Kg	J	E

Sample ID: **SL-330-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:08:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.204	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: **SL-330-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0607	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	4.74		0.0809	MDL	0.405	PQL	mg/Kg	J	Q, E
CHROMIUM	22.6		0.121	MDL	0.405	PQL	mg/Kg	J	E
COBALT	5.12		0.0202	MDL	0.101	PQL	mg/Kg	J	A
COPPER	14.0		0.0667	MDL	0.405	PQL	mg/Kg	J	E
LEAD	7.90		0.0105	MDL	0.202	PQL	mg/Kg	J	E
NICKEL	11.8		0.101	MDL	0.405	PQL	mg/Kg	J	E
SILVER	0.0465	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	34.8		0.0222	MDL	0.101	PQL	mg/Kg	J	Q, E, E
ZINC	98.3		0.566	MDL	3.03	PQL	mg/Kg	J	E

Sample ID: **SL-331-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-331-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 10:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0956	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q
ARSENIC	4.73		0.0833	MDL	0.416	PQL	mg/Kg	J	Q, E
CHROMIUM	17.8		0.125	MDL	0.416	PQL	mg/Kg	J	E
COBALT	5.32		0.0208	MDL	0.104	PQL	mg/Kg	J	A
COPPER	7.79		0.0687	MDL	0.416	PQL	mg/Kg	J	E
LEAD	5.61		0.0108	MDL	0.208	PQL	mg/Kg	J	E
NICKEL	9.91		0.104	MDL	0.416	PQL	mg/Kg	J	E
SILVER	0.0312	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	34.1		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E, E
ZINC	70.0		0.583	MDL	3.12	PQL	mg/Kg	J	E

Sample ID: SL-332-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 2:23:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0768	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-332-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 2:23:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0752	J	0.0630	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	2.65		0.0840	MDL	0.420	PQL	mg/Kg	J	Q, E
CADMIUM	0.0721	J	0.0420	MDL	0.105	PQL	mg/Kg	J	Z
CHROMIUM	13.9		0.126	MDL	0.420	PQL	mg/Kg	J	E
COBALT	4.18		0.0210	MDL	0.105	PQL	mg/Kg	J	A
COPPER	7.06		0.0693	MDL	0.420	PQL	mg/Kg	J	E
LEAD	4.43		0.0109	MDL	0.210	PQL	mg/Kg	J	E
NICKEL	5.93		0.105	MDL	0.420	PQL	mg/Kg	J	E
SILVER	0.0272	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	34.3		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, E, E
ZINC	60.0		0.588	MDL	3.15	PQL	mg/Kg	J	E

Sample ID: SL-333-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 1:05:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0643	J	0.0408	MDL	0.408	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-333-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:05:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0612	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	1.38		0.0817	MDL	0.408	PQL	mg/Kg	J	Q, E
CHROMIUM	7.34		0.122	MDL	0.408	PQL	mg/Kg	J	E
COBALT	4.41		0.0204	MDL	0.102	PQL	mg/Kg	J	A
COPPER	8.73		0.0674	MDL	0.408	PQL	mg/Kg	J	E
LEAD	2.90		0.0106	MDL	0.204	PQL	mg/Kg	J	E
NICKEL	4.86		0.102	MDL	0.408	PQL	mg/Kg	J	E
SILVER	0.0162	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	32.7		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, E, E
ZINC	61.1		0.572	MDL	3.06	PQL	mg/Kg	J	E

Sample ID: **SL-334-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 2:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.130	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	5.55		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
CHROMIUM	17.0		0.132	MDL	0.440	PQL	mg/Kg	J	E
COBALT	6.11		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	11.1		0.0726	MDL	0.440	PQL	mg/Kg	J	E
LEAD	7.93		0.0114	MDL	0.220	PQL	mg/Kg	J	E
NICKEL	11.0		0.110	MDL	0.440	PQL	mg/Kg	J	E
SILVER	0.0491	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	39.1		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, E, E
ZINC	139		0.616	MDL	3.30	PQL	mg/Kg	J	E

Sample ID: **SL-335-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.234		0.0652	MDL	0.217	PQL	mg/Kg	J	Q
ARSENIC	3.94		0.0869	MDL	0.435	PQL	mg/Kg	J	Q, E
CHROMIUM	17.8		0.130	MDL	0.435	PQL	mg/Kg	J	E
COBALT	6.18		0.0217	MDL	0.109	PQL	mg/Kg	J	A
COPPER	15.0		0.0717	MDL	0.435	PQL	mg/Kg	J	E
LEAD	4.35		0.0113	MDL	0.217	PQL	mg/Kg	J	E
NICKEL	11.2		0.109	MDL	0.435	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-335-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 1:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0293	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	46.5		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, E, E
ZINC	58.3		0.609	MDL	3.26	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP-024-QC-021011 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z, FD

Sample ID: SL-319-SA5B-SB-4.0-5.0 *Collected:* 2/10/2011 3:27:00 *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	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-321-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 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
HEXAVALENT CHROMIUM	0.37	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-322-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.27	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-326-SA5B-SB-14.0-15 *Collected:* 2/10/2011 8:59:00 *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	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-326-SA5B-SB-9.0-10.0 *Collected:* 2/10/2011 8:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-330-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 10:08:00 *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	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-331-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 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
HEXAVALENT CHROMIUM	0.23	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-332-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 2:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-333-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.1	PQL	mg/Kg	UJ	FD

Sample ID: SL-334-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 2:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.23	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP-024-QC-021011 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0030	U	0.0030	MDL	0.104	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: **SL-315-SA5B-SB-3.0-4.0** ***Collected:*** **2/10/2011 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
MERCURY	0.0053	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: **SL-321-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 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
MERCURY	0.0288	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-322-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:25:00** ***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	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-14.0-15** ***Collected:*** **2/10/2011 8:59:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0542	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0182	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-9.0-10.0** ***Collected:*** **2/10/2011 8:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0426	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: **SL-329-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0080	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: **SL-330-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:08:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-331-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 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
MERCURY	0.0133	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-332-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 2:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0130	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-333-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 1:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0125	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z, FD

Sample ID: SL-334-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 2:49:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0159	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SL-335-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 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
MERCURY	0.0499	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-330-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 10:08:00 ***Analysis Type:*** REA2 ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	2.6	J	2.1	MDL	6.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: EB31-SA5B-021011 ***Collected:*** 2/10/2011 3:15:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN	0.0085	U	0.0085	MDL	0.021	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-331-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 10:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.34	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: EB31-SA5B-021011 ***Collected:*** 2/10/2011 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
Aroclor 5432	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	L
Aroclor 5442	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	L
Aroclor 5460	0.11	U	0.11	MDL	0.53	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP-024-QC-021011 ***Collected:*** 2/10/2011 1:05:00 ***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 1254	2.0		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1260	1.2	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, FD
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	8.2		1.1	MDL	3.5	PQL	ug/Kg	J	L, FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-315-SA5B-SB-3.0-4.0** ***Collected:*** **2/10/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	2.5	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: **SL-319-SA5B-SB-4.0-5.0** ***Collected:*** **2/10/2011 3:27:00** ***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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-321-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:06:00** ***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 1254	1.4	J	0.87	MDL	4.5	PQL	ug/Kg	J	Z, L
AROCLOR 1260	1.5	J	1.0	MDL	4.5	PQL	ug/Kg	J	Z, L
Aroclor 5432	2.6	U	2.6	MDL	8.7	PQL	ug/Kg	UJ	L
Aroclor 5442	2.6	U	2.6	MDL	8.7	PQL	ug/Kg	UJ	L
Aroclor 5460	4.5	J	2.6	MDL	8.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-322-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:25:00** ***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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	4.3		1.1	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: **SL-326-SA5B-SB-14.0-15** ***Collected:*** **2/10/2011 8:59:00** ***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 1254	1.7	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	L
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-326-SA5B-SB-9.0-10.0** ***Collected:*** **2/10/2011 8:48:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.9	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-329-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:48:00** ***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 1254	1.6	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.92	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: **SL-330-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:08:00** ***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 1254	1.4	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.89	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L

Sample ID: **SL-331-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:35:00** ***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	1.3	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-331-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 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
Aroclor 5460	2.2	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: **SL-332-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 2:23:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	6.6		1.1	MDL	3.6	PQL	ug/Kg	J	L

Sample ID: **SL-333-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:05:00** ***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 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	FD
AROCLOR 1260	0.43	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z, FD
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.6	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L, FD

Sample ID: **SL-334-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 2:49:00** ***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 1254	1.1	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-335-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP-024-QC-021011 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.66	U	0.66	MDL	1.8	PQL	ug/Kg	UJ	FD
MCPA	81	U	81	MDL	270	PQL	ug/Kg	UJ	FD

Sample ID: SL-329-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 9:48:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-T	0.092	J	0.087	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-332-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 2:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.72	J	0.67	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-333-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	2.0		0.66	MDL	1.8	PQL	ug/Kg	J	FD
MCPA	130	J	81	MDL	270	PQL	ug/Kg	J	Z, FD

Sample ID: SL-334-SA5B-SS-0.0-0.5 *Collected:* 2/10/2011 2:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	0.78	J	0.69	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP-024-QC-021011 *Collected:* 2/10/2011 1:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-321-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 9:06:00 ***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	58	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	45	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	47	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	59	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	27	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	70	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	92	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	65	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	100	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-330-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 10:08:00 ***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	27	J	17	MDL	170	PQL	ug/Kg	J	Z
CHRYSENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z
Dimethylphthalate	61	J	17	MDL	170	PQL	ug/Kg	J	Z
PYRENE	18	J	17	MDL	170	PQL	ug/Kg	J	Z

Sample ID: SL-332-SA5B-SS-0.0-0.5 ***Collected:*** 2/10/2011 2:23:00 ***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	97	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	120	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	150	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	48	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	62	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	130	J	18	MDL	180	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	45	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	75	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C SIM **Matrix: AQ**

Sample ID: **EB31-SA5B-021011** ***Collected:*** **2/10/2011 3:15:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	0.23	J	0.051	MDL	1.0	PQL	ug/L	UJ	L, B
Butylbenzylphthalate	0.14	J	0.051	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.14	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Dimethylphthalate	0.051	U	0.051	MDL	1.0	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.58	J	0.051	MDL	1.0	PQL	ug/L	U	B
Di-n-octylphthalate	0.19	J	0.051	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.019	J	0.010	MDL	0.051	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: **DUP-024-QC-021011** ***Collected:*** **2/10/2011 1:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.87	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.72	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.4	MDL	19	PQL	ug/Kg	U	B
CHRYSENE	1.5	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.5	J	6.4	MDL	19	PQL	ug/Kg	J	Z, FD
Di-n-octylphthalate	7.2	J	6.4	MDL	19	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-315-SA5B-SB-3.0-4.0** ***Collected:*** **2/10/2011 10:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.6	J	6.5	MDL	19	PQL	ug/Kg	U	B
CHRYSENE	1.6	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.5	J	6.5	MDL	19	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-315-SA5B-SB-3.0-4.0** ***Collected:*** **2/10/2011 10:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-319-SA5B-SB-4.0-5.0** ***Collected:*** **2/10/2011 3:27:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	5.1	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	6.5	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	4.3	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	96	J	32	MDL	96	PQL	ug/Kg	U	B
CHRYSENE	7.9	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	38	J	32	MDL	96	PQL	ug/Kg	J	Z
FLUORANTHENE	3.7	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
PYRENE	5.2	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: **SL-322-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	32	J	32	MDL	95	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	3.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
Dimethylphthalate	39	J	32	MDL	95	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	6.2	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-14.0-15** ***Collected:*** **2/10/2011 8:59:00** ***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	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	7.0	MDL	21	PQL	ug/Kg	U	B
FLUORANTHENE	0.86	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***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	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***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(B)FLUORANTHENE	1.3	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.7	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	1.6	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-326-SA5B-SB-9.0-10.0** ***Collected:*** **2/10/2011 8:48:00** ***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	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	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
BIS(2-ETHYLHEXYL)PHTHALATE	8.4	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-329-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 9:48:00** ***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	0.47	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	6.9	J	6.4	MDL	19	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	0.99	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.3	J	6.4	MDL	19	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-330-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:08:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	4.1	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	7.7	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	34	J	31	MDL	94	PQL	ug/Kg	U	B
FLUORANTHENE	6.5	J	3.5	MDL	8.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-331-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	5.1	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	5.9	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.8	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
CHRYSENE	5.2	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
FLUORANTHENE	4.7	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
PYRENE	6.9	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: **SL-333-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:05:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.89	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q
BENZO(A)PYRENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q
BENZO(B)FLUORANTHENE	1.9		0.71	MDL	1.8	PQL	ug/Kg	J	Q, Q
BENZO(G,H,I)PERYLENE	0.83	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, FD
BENZO(K)FLUORANTHENE	0.89	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q
BIS(2-ETHYLHEXYL)PHTHALATE	8.8	J	6.4	MDL	19	PQL	ug/Kg	U	B
CHRYSENE	1.3	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q
Di-n-butylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	FD
Di-n-octylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	FD
FLUORANTHENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q
PYRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, Q, Q

Sample ID: **SL-334-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 2:49:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	7.3	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	6.5	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	65	J	34	MDL	100	PQL	ug/Kg	U	B
Di-n-octylphthalate	35	J	34	MDL	100	PQL	ug/Kg	J	Z
PHENANTHRENE	5.1	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z
PYRENE	6.5	J	3.7	MDL	9.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-335-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 1:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)PYRENE	0.86	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.3	J	6.6	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.64	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: **SL-330-SA5B-SS-0.0-0.5** ***Collected:*** **2/10/2011 10:08:00** ***Analysis Type:*** **REA4** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	190	J	100	MDL	520	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-315-SA5B-SB-3.0-4.0** ***Collected:*** **2/10/2011 10:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.01**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.54	U	0.54	MDL	5.4	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.40	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	1.5	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.97	J	0.26	MDL	4.4	PQL	ug/Kg	U	B
O-XYLENE	0.19	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: **SL-319-SA5B-SB-4.0-5.0** ***Collected:*** **2/10/2011 3:27:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.04**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.56	U	0.56	MDL	5.5	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.12	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	0.36	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.59	J	0.27	MDL	4.4	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-326-SA5B-SB-14.0-15** ***Collected:*** **2/10/2011 8:59:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.49	U	0.49	MDL	4.9	PQL	ug/Kg	UJ	L
ACETONE	14		6.6	MDL	7.9	PQL	ug/Kg	U	B
ETHYLBENZENE	0.07	J	0.06	MDL	3.9	PQL	ug/Kg	J	Z
m,p-Xylene	0.23	J	0.17	MDL	3.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.67	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: **SL-326-SA5B-SB-18.5-19.5** ***Collected:*** **2/10/2011 9:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.11**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.61	U	0.61	MDL	6.1	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.09	J	0.07	MDL	4.9	PQL	ug/Kg	J	Z
m,p-Xylene	0.30	J	0.21	MDL	4.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.1	J	0.29	MDL	4.9	PQL	ug/Kg	U	B

Sample ID: **SL-326-SA5B-SB-9.0-10.0** ***Collected:*** **2/10/2011 8:48:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.02**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-Chloro-1,1,1-trifluoroethane	0.57	U	0.57	MDL	5.7	PQL	ug/Kg	UJ	L
ACETONE	7.9	J	7.6	MDL	9.1	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	0.90	J	0.27	MDL	4.5	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE080

Method Blank Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04548FB222000	2/15/2011 8:00:00 PM	CALCIUM	0.0894 mg/L	EB31-SA5B-021011

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04508AB221600	2/15/2011 4:00:00 PM	CALCIUM PHOSPHORUS TIN	9.29 mg/Kg 0.808 mg/Kg 1.48 mg/Kg	DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-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
DUP-024-QC-021011(REA)	TIN	1.79 mg/Kg	1.79U mg/Kg
SL-315-SA5B-SB-3.0-4.0(REA)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-319-SA5B-SB-4.0-5.0(REA)	TIN	2.69 mg/Kg	2.69U mg/Kg
SL-321-SA5B-SS-0.0-0.5(REA)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-322-SA5B-SS-0.0-0.5(REA)	TIN	2.73 mg/Kg	2.73U mg/Kg
SL-326-SA5B-SB-14.0-15(REA)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-326-SA5B-SB-18.5-19.5(REA)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-326-SA5B-SB-9.0-10.0(REA)	TIN	2.01 mg/Kg	2.01U mg/Kg
SL-329-SA5B-SS-0.0-0.5(REA)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-330-SA5B-SS-0.0-0.5(REA)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-331-SA5B-SS-0.0-0.5(REA)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-332-SA5B-SS-0.0-0.5(REA)	TIN	2.77 mg/Kg	2.77U mg/Kg
SL-333-SA5B-SS-0.0-0.5(REA)	TIN	1.81 mg/Kg	1.81U mg/Kg
SL-334-SA5B-SS-0.0-0.5(REA)	TIN	4.79 mg/Kg	4.79U mg/Kg
SL-335-SA5B-SS-0.0-0.5(REA)	TIN	1.78 mg/Kg	1.78U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04526AB221501A	2/24/2011 3:01:00 PM	COPPER	0.117 mg/Kg	DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-SS-0.0-0.5

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P45451AB241812A	2/15/2011 6:12:00 PM	MCPP	88 ug/Kg	SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB68B211247A	2/11/2011 12:47:00 PM	ACETONE CHLOROFORM METHYLENE CHLORIDE TOLUENE	9.5 ug/Kg 0.23 ug/Kg 0.54 ug/Kg 0.11 ug/Kg	SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-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
SL-315-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.97 ug/Kg	4.4U ug/Kg
SL-319-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.59 ug/Kg	4.4U ug/Kg
SL-326-SA5B-SB-14.0-15(RES)	ACETONE	14 ug/Kg	14U ug/Kg
SL-326-SA5B-SB-14.0-15(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	3.9U ug/Kg
SL-326-SA5B-SB-18.5-19.5(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.9U ug/Kg
SL-326-SA5B-SB-9.0-10.0(RES)	ACETONE	7.9 ug/Kg	9.1U ug/Kg
SL-326-SA5B-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.90 ug/Kg	4.5U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLF05B262339	2/22/2011 11:39:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	33 ug/Kg	DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-SS-0.0-0.5

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWF04B262156	2/15/2011 9:56:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Di-n-butylphthalate Di-n-octylphthalate	0.19 ug/L 0.13 ug/L 0.14 ug/L 0.18 ug/L	EB31-SA5B-021011

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
EB31-SA5B-021011(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.23 ug/L	1.0U ug/L
EB31-SA5B-021011(RES)	Butylbenzylphthalate	0.14 ug/L	1.0U ug/L
EB31-SA5B-021011(RES)	Di-n-butylphthalate	0.58 ug/L	1.0U ug/L
EB31-SA5B-021011(RES)	Di-n-octylphthalate	0.19 ug/L	1.0U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLD04B261723	2/17/2011 5:23:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	8.7 ug/Kg	DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-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
DUP-024-QC-021011(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	19U ug/Kg
SL-315-SA5B-SB-3.0-4.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.6 ug/Kg	19U ug/Kg
SL-319-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	96 ug/Kg	96U ug/Kg
SL-322-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	32 ug/Kg	95U ug/Kg
SL-326-SA5B-SB-14.0-15(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	21U ug/Kg
SL-326-SA5B-SB-18.5-19.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	12 ug/Kg	20U ug/Kg
SL-326-SA5B-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.4 ug/Kg	20U ug/Kg
SL-329-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	6.9 ug/Kg	19U ug/Kg
SL-330-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	34 ug/Kg	94U ug/Kg
SL-333-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.8 ug/Kg	19U ug/Kg
SL-334-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	65 ug/Kg	100U ug/Kg
SL-335-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.3 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_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-333-SA5B-SS-0.0-0.5MS **SL-333-SA5B-SS-0.0-0.5MSD** (DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-SS-0.0-0.5)	ARSENIC ZINC	- 156	131 -	75.00-125.00 75.00-125.00	- -	ARSENIC ZINC	J (all detects) Zn No Qual, >4x
SL-333-SA5B-SS-0.0-0.5MS **SL-333-SA5B-SS-0.0-0.5MSD** (DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-SS-0.0-0.5)	ANTIMONY VANADIUM	48 239	48 -	75.00-125.00 75.00-125.00	- 31 (20.00)	ANTIMONY VANADIUM	J(all detects) UJ(all non-detects)
SL-333-SA5B-SS-0.0-0.5MS **SL-333-SA5B-SS-0.0-0.5MSD** (DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-321-SA5B-SS-0.0-0.5 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-SS-0.0-0.5)	BARIUM	63	131	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_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-333-SA5B-SS-0.0-0.5MS	ALUMINUM	1434	1664	75.00-125.00	-	ALUMINUM	
SL-333-SA5B-SS-0.0-0.5MSD	CALCIUM	438	335	75.00-125.00	-	CALCIUM	
(DUP-024-QC-021011	IRON	4009	1994	75.00-125.00	-	IRON	
SL-315-SA5B-SB-3.0-4.0	MAGNESIUM	572	442	75.00-125.00	-	MAGNESIUM	J(all detects)
SL-319-SA5B-SB-4.0-5.0	MANGANESE	189	166	75.00-125.00	-	MANGANESE	
SL-321-SA5B-SS-0.0-0.5	PHOSPHORUS	162	-	75.00-125.00	-	PHOSPHORUS	Al, Ca, Fe,
SL-322-SA5B-SS-0.0-0.5	POTASSIUM	147	152	75.00-125.00	-	POTASSIUM	Mg, P, Ti
SL-326-SA5B-SB-14.0-15	TITANIUM	527	321	75.00-125.00	-	TITANIUM	No Qual, >4x
SL-326-SA5B-SB-18.5-19.5							
SL-326-SA5B-SB-9.0-10.0							
SL-329-SA5B-SS-0.0-0.5							
SL-330-SA5B-SS-0.0-0.5							
SL-331-SA5B-SS-0.0-0.5							
SL-332-SA5B-SS-0.0-0.5							
SL-333-SA5B-SS-0.0-0.5							
SL-334-SA5B-SS-0.0-0.5							
SL-335-SA5B-SS-0.0-0.5)							

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-333-SA5B-SS-0.0-0.5MS	BENZO(A)ANTHRACENE	257	-	39.00-144.00	78 (30.00)	BENZO(A)ANTHRACENE	
SL-333-SA5B-SS-0.0-0.5MSD	BENZO(A)PYRENE	307	-	34.00-156.00	94 (30.00)	BENZO(A)PYRENE	
(SL-333-SA5B-SS-0.0-0.5)	BENZO(B)FLUORANTHENE	402	-	43.00-155.00	103 (30.00)	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-	-	33.00-141.00	40 (30.00)	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	236	-	42.00-144.00	69 (30.00)	BENZO(K)FLUORANTHENE	
	Butylbenzylphthalate	147	-	73.00-140.00	-	Butylbenzylphthalate	J(all detects)
	CHRYSENE	290	-	29.00-156.00	93 (30.00)	CHRYSENE	
	Di-n-octylphthalate	193	-	40.00-192.00	-	Di-n-octylphthalate	
	FLUORANTHENE	-	-	26.00-166.00	41 (30.00)	FLUORANTHENE	
	PYRENE	214	-	15.00-153.00	67 (30.00)	PYRENE	

Method: 314.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-333-SA5B-SS-0.0-0.5MS	PERCHLORATE	130	-	80.00-120.00	-	PERCHLORATE	
(SL-331-SA5B-SS-0.0-0.5							
SL-332-SA5B-SS-0.0-0.5							J(all detects)
SL-333-SA5B-SS-0.0-0.5							
SL-334-SA5B-SS-0.0-0.5							
SL-335-SA5B-SS-0.0-0.5)							

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-329-SA5B-SS-0.0-0.5MSD	METHOXYCHLOR	-	-	32.00-147.00	51 (50.00)	METHOXYCHLOR	J(all detects)
(SL-329-SA5B-SS-0.0-0.5)							

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-333-SA5B-SS-0.0-0.5DUP	ANTIMONY	80	20.00	
(DUP-024-QC-021011	ARSENIC	1.694	0.880	
SL -315-SA5B-SB-3.0-4.0	BERYLLIUM	42	20.00	J (all detects)
SL -319-SA5B-SB-4.0-5.0	CADMIUM	70	20.00	UJ (all non-detects)
SL -321-SA5B-SS-0.0-0.5	CHROMIUM	58	20.00	
SL -322-SA5B-SS-0.0-0.5	COPPER	42	20.00	Sb, Be, Cd, Mo, Se, Ag
SL -326-SA5B-SB-14.0-15	LEAD	64	20.00	No Qual
SL -326-SA5B-SB-18.5-19.5	MOLYBDENUM	51	20.00	OK by difference
SL -326-SA5B-SB-9.0-10.0	NICKEL	30	20.00	
SL -329-SA5B-SS-0.0-0.5	SELENIUM	79	20.00	
SL -330-SA5B-SS-0.0-0.5	SILVER	87	20.00	
SL -331-SA5B-SS-0.0-0.5	VANADIUM	39	20.00	
SL -332-SA5B-SS-0.0-0.5	ZINC	80	20.00	
SL -333-SA5B-SS-0.0-0.5				
SL -334-SA5B-SS-0.0-0.5				
SL -335-SA5B-SS-0.0-0.5)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P5WFLCSQ262229 P5WFLCSY262301 (EB31-SA5B-021011)	BENZO(A)ANTHRACENE BIS(2-ETHYLHEXYL)PHTHALAT	116 -	118 136	72.00-114.00 70.00-130.00	- -	BENZO(A)ANTHRACENE BIS(2-ETHYLHEXYL)PHTHALA	J (all detects)
P5WFLCSQ262229 P5WFLCSY262301 (EB31-SA5B-021011)	Dimethylphthalate	68	65	70.00-130.00	-	Dimethylphthalate	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10472AY240640A (EB31-SA5B-021011)	ENDRIN	-	-	52.00-132.00	32 (30.00)	ENDRIN	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10473AQ241915A P10473AY241856A (EB31-SA5B-021011)	Aroclor 5442	68	70	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10473AQ241802A P10473AY241829A (EB31-SA5B-021011)	DINOSEB	98	95	23.00-93.00	-	DINOSEB	J(all detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10465AQ240300A (SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5)	2,4,6-TRINITROTOLUENE 2,6-DINITROTOLUENE 2-AMINO-4,6-DINITROTOLUENE NITROBENZENE PETN	121 121 123 122 126	- - - - -	80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00	- - - - -	2,4,6-TRINITROTOLUENE 2,6-DINITROTOLUENE 2-AMINO-4,6-DINITROTOLUEN NITROBENZENE PETN	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_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
P10460AQ240146A **P10460AY240127A** (DUP-024-QC-021011 SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-322-SA5B-SS-0.0-0.5 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0 SL-329-SA5B-SS-0.0-0.5 SL-330-SA5B-SS-0.0-0.5 SL-331-SA5B-SS-0.0-0.5 SL-332-SA5B-SS-0.0-0.5 SL-333-SA5B-SS-0.0-0.5 SL-334-SA5B-SS-0.0-0.5 SL-335-SA5B-SS-0.0-0.5)	Aroclor 5442	63	60	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)
P10528AQ240851A (SL-321-SA5B-SS-0.0-0.5)	AROCLOR 1016 AROCLOR 1260	207 235	- -	72.00-120.00 65.00-137.00	- -	AROCLOR 1016, 1221, 1232, 1242 1248, 1254, 1260	J(all detects)
P10528AQ240929A **P10528AY240910A** (SL-321-SA5B-SS-0.0-0.5)	Aroclor 5442	57	70	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8260B

Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B68Y211421A (SL-315-SA5B-SB-3.0-4.0 SL-319-SA5B-SB-4.0-5.0 SL-326-SA5B-SB-14.0-15 SL-326-SA5B-SB-18.5-19.5 SL-326-SA5B-SB-9.0-10.0)	2-Chloro-1,1,1-trifluoroethane	-	75	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
MOISTURE	5.8	6.8	16		No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
ALUMINUM	5420	5740	6	50.00	No Qualifiers Applied
BORON	1.48	1.44	3	50.00	
CALCIUM	2600	2740	5	50.00	
IRON	14000	14900	6	50.00	
LITHIUM	6.6	7.8	17	50.00	
MAGNESIUM	2260	2530	11	50.00	
MANGANESE	132	148	11	50.00	
PHOSPHORUS	423	459	8	50.00	
POTASSIUM	1480	1600	8	50.00	
SODIUM	226	249	10	50.00	
STRONTIUM	19.7	31.4	46	50.00	
TIN	1.81	1.79	1	50.00	
TITANIUM	654	698	7	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
ANTIMONY	0.115	0.125	8	50.00	No Qualifiers Applied
ARSENIC	1.38	2.04	39	50.00	
BARIUM	62.4	64.9	4	50.00	
BERYLLIUM	0.187	0.238	24	50.00	
CADMIUM	0.107	0.174	48	50.00	
CHROMIUM	7.34	9.70	28	50.00	
COBALT	4.41	3.70	18	50.00	
COPPER	8.73	10.3	17	50.00	
LEAD	2.90	3.70	24	50.00	
MOLYBDENUM	0.199	0.279	33	50.00	
NICKEL	4.86	5.64	15	50.00	
SELENIUM	0.0643	0.0689	7	50.00	
SILVER	0.0162	0.0230	35	50.00	
THALLIUM	0.158	0.0996	45	50.00	
VANADIUM	32.7	34.8	6	50.00	
ZINC	61.1	91.4	40	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
HEXAVALENT CHROMIUM	1.1 U	0.29	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
MERCURY	0.0125	0.104 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
AROCLOR 1254	1.8 U	2.0	200	50.00	J(all detects) UJ(all non-detects)
AROCLOR 1260	0.43	1.2	94	50.00	
Aroclor 5460	1.6	8.2	135	50.00	

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
2,4-DB	2.0	1.8 U	200	50.00	J(all detects) UJ(all non-detects)
MCPA	130	270 U	200	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
BENZO(A)ANTHRACENE	0.89	1.0	12	50.00	No Qualifiers Applied
BENZO(A)PYRENE	1.1	0.87	23	50.00	
BENZO(K)FLUORANTHENE	0.89	0.72	21	50.00	
BIS(2-ETHYLHEXYL)PHTHALATE	8.8	11	22	50.00	
CHRYSENE	1.3	1.5	14	50.00	
FLUORANTHENE	1.1	1.1	0	50.00	
PYRENE	1.3	1.2	8	50.00	
BENZO(G,H,I)PERYLENE	0.83	1.8 U	200	50.00	J(all detects) UJ(all non-detects)
Di-n-butylphthalate	19 U	6.5	200	50.00	
Di-n-octylphthalate	19 U	7.2	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
PH	8.64	6.97	21	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-333-SA5B-SS-0.0-0.5	DUP-024-QC-021011			
Oxidation Reduction Potential	400	360	11		No Qualifiers Applied

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB31-SA5B-021011	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.23	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.14	1.0	PQL	ug/L	
	Diethylphthalate	J	0.14	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.58	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.19	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.019	0.051	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-315-SA5B-SB-3.0-4.0	Nitrate-NO3	J	1.0	1.6	PQL	mg/Kg	J (all detects)
SL-321-SA5B-SS-0.0-0.5	FLUORIDE	J	0.86	1.1	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	BORON	J	1.44	5.26	PQL	mg/Kg	J (all detects)
	TIN	J	1.79	10.5	PQL	mg/Kg	
SL-315-SA5B-SB-3.0-4.0	BORON	J	1.79	5.28	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	10.6	PQL	mg/Kg	
SL-319-SA5B-SB-4.0-5.0	BORON	J	1.87	5.25	PQL	mg/Kg	J (all detects)
	TIN	J	2.69	10.5	PQL	mg/Kg	
	Zirconium	J	1.07	5.25	PQL	mg/Kg	
SL-321-SA5B-SS-0.0-0.5	TIN	J	2.62	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.75	5.28	PQL	mg/Kg	
SL-322-SA5B-SS-0.0-0.5	BORON	J	3.94	5.08	PQL	mg/Kg	J (all detects)
	TIN	J	2.73	10.2	PQL	mg/Kg	
	Zirconium	J	1.41	5.08	PQL	mg/Kg	
SL-326-SA5B-SB-14.0-15	BORON	J	2.09	5.80	PQL	mg/Kg	J (all detects)
	TIN	J	2.88	11.6	PQL	mg/Kg	
	Zirconium	J	1.85	5.80	PQL	mg/Kg	
SL-326-SA5B-SB-18.5-19.5	BORON	J	1.67	5.44	PQL	mg/Kg	J (all detects)
	TIN	J	2.65	10.9	PQL	mg/Kg	
	Zirconium	J	1.23	5.44	PQL	mg/Kg	
SL-326-SA5B-SB-9.0-10.0	BORON	J	2.83	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.01	11.1	PQL	mg/Kg	
	Zirconium	J	2.96	5.54	PQL	mg/Kg	
SL-329-SA5B-SS-0.0-0.5	BORON	J	3.02	5.20	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.4	PQL	mg/Kg	
	Zirconium	J	1.25	5.20	PQL	mg/Kg	
SL-330-SA5B-SS-0.0-0.5	BORON	J	4.01	5.01	PQL	mg/Kg	J (all detects)
	TIN	J	2.58	10.0	PQL	mg/Kg	
	Zirconium	J	2.67	5.01	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SS-0.0-0.5	BORON	J	3.69	5.15	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	10.3	PQL	mg/Kg	
	Zirconium	J	1.28	5.15	PQL	mg/Kg	
SL-332-SA5B-SS-0.0-0.5	BORON	J	2.22	5.30	PQL	mg/Kg	J (all detects)
	TIN	J	2.77	10.6	PQL	mg/Kg	
SL-333-SA5B-SS-0.0-0.5	BORON	J	1.48	5.15	PQL	mg/Kg	J (all detects)
	TIN	J	1.81	10.3	PQL	mg/Kg	
SL-334-SA5B-SS-0.0-0.5	BORON	J	3.23	5.50	PQL	mg/Kg	J (all detects)
	TIN	J	4.79	11.0	PQL	mg/Kg	
SL-335-SA5B-SS-0.0-0.5	BORON	J	3.40	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	1.78	10.7	PQL	mg/Kg	
	Zirconium	J	1.04	5.33	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	ANTIMONY	J	0.125	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0689	0.417	PQL	mg/Kg	
	SILVER	J	0.0230	0.104	PQL	mg/Kg	
	THALLIUM	J	0.0996	0.104	PQL	mg/Kg	
SL-315-SA5B-SB-3.0-4.0	ANTIMONY	J	0.0788	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.172	0.427	PQL	mg/Kg	
	SILVER	J	0.0695	0.107	PQL	mg/Kg	
SL-319-SA5B-SB-4.0-5.0	SELENIUM	J	0.153	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0767	0.106	PQL	mg/Kg	
SL-321-SA5B-SS-0.0-0.5	ANTIMONY	J	0.182	0.203	PQL	mg/Kg	J (all detects)
SL-322-SA5B-SS-0.0-0.5	ANTIMONY	J	0.139	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.204	0.422	PQL	mg/Kg	
	SILVER	J	0.0637	0.106	PQL	mg/Kg	
SL-326-SA5B-SB-14.0-15	ANTIMONY	J	0.127	0.232	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.102	0.464	PQL	mg/Kg	
	SILVER	J	0.0403	0.116	PQL	mg/Kg	
SL-326-SA5B-SB-18.5-19.5	ANTIMONY	J	0.154	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.106	0.108	PQL	mg/Kg	
	SELENIUM	J	0.0660	0.431	PQL	mg/Kg	
	SILVER	J	0.0275	0.108	PQL	mg/Kg	
SL-326-SA5B-SB-9.0-10.0	ANTIMONY	J	0.134	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.100	0.443	PQL	mg/Kg	
	SILVER	J	0.0695	0.111	PQL	mg/Kg	
SL-329-SA5B-SS-0.0-0.5	ANTIMONY	J	0.116	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.116	0.416	PQL	mg/Kg	
	SILVER	J	0.0272	0.104	PQL	mg/Kg	
SL-330-SA5B-SS-0.0-0.5	ANTIMONY	J	0.113	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.204	0.405	PQL	mg/Kg	
	SILVER	J	0.0465	0.101	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0956	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.118	0.416	PQL	mg/Kg	
	SILVER	J	0.0312	0.104	PQL	mg/Kg	
SL-332-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0752	0.210	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0721	0.105	PQL	mg/Kg	
	SELENIUM	J	0.0768	0.420	PQL	mg/Kg	
	SILVER	J	0.0272	0.105	PQL	mg/Kg	
SL-333-SA5B-SS-0.0-0.5	ANTIMONY	J	0.115	0.204	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0643	0.408	PQL	mg/Kg	
	SILVER	J	0.0162	0.102	PQL	mg/Kg	
SL-334-SA5B-SS-0.0-0.5	ANTIMONY	J	0.130	0.220	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0491	0.110	PQL	mg/Kg	
SL-335-SA5B-SS-0.0-0.5	SILVER	J	0.0293	0.109	PQL	mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-319-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-321-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)
SL-322-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.27	1.1	PQL	mg/Kg	J (all detects)
SL-326-SA5B-SB-14.0-15	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SL-326-SA5B-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.66	1.1	PQL	mg/Kg	J (all detects)
SL-330-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.38	1.0	PQL	mg/Kg	J (all detects)
SL-331-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-332-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)
SL-334-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-315-SA5B-SB-3.0-4.0	MERCURY	J	0.0053	0.105	PQL	mg/Kg	J (all detects)
SL-321-SA5B-SS-0.0-0.5	MERCURY	J	0.0288	0.102	PQL	mg/Kg	J (all detects)
SL-322-SA5B-SS-0.0-0.5	MERCURY	J	0.0154	0.102	PQL	mg/Kg	J (all detects)
SL-326-SA5B-SB-14.0-15	MERCURY	J	0.0542	0.111	PQL	mg/Kg	J (all detects)
SL-326-SA5B-SB-18.5-19.5	MERCURY	J	0.0182	0.106	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-326-SA5B-SB-9.0-10.0	MERCURY	J	0.0426	0.104	PQL	mg/Kg	J (all detects)
SL-329-SA5B-SS-0.0-0.5	MERCURY	J	0.0080	0.102	PQL	mg/Kg	J (all detects)
SL-330-SA5B-SS-0.0-0.5	MERCURY	J	0.0091	0.102	PQL	mg/Kg	J (all detects)
SL-331-SA5B-SS-0.0-0.5	MERCURY	J	0.0133	0.101	PQL	mg/Kg	J (all detects)
SL-332-SA5B-SS-0.0-0.5	MERCURY	J	0.0130	0.104	PQL	mg/Kg	J (all detects)
SL-333-SA5B-SS-0.0-0.5	MERCURY	J	0.0125	0.103	PQL	mg/Kg	J (all detects)
SL-334-SA5B-SS-0.0-0.5	MERCURY	J	0.0159	0.109	PQL	mg/Kg	J (all detects)
SL-335-SA5B-SS-0.0-0.5	MERCURY	J	0.0499	0.106	PQL	mg/Kg	J (all detects)

Method: 8015B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-330-SA5B-SS-0.0-0.5	METHANOL	J	190	520	PQL	ug/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-330-SA5B-SS-0.0-0.5	EFH (C15-C20)	J	2.6	6.2	PQL	mg/Kg	J (all detects)

Method: 8081A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SS-0.0-0.5	ENDRIN KETONE	J	0.34	0.36	PQL	ug/Kg	J (all detects)

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	AROCLOR 1260	J	1.2	1.8	PQL	ug/Kg	J (all detects)
SL-315-SA5B-SB-3.0-4.0	Aroclor 5460	J	2.5	3.6	PQL	ug/Kg	J (all detects)
SL-321-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.4 1.5 4.5	4.5 4.5 8.7	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-326-SA5B-SB-14.0-15	AROCLOR 1254	J	1.7	2.0	PQL	ug/Kg	J (all detects)
SL-326-SA5B-SB-9.0-10.0	Aroclor 5460	J	1.9	3.7	PQL	ug/Kg	J (all detects)
SL-329-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.6 0.92 1.1	1.8 1.8 3.5	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-330-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.4 0.89	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-331-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.3 2.2	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-333-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.43 1.6	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-334-SA5B-SS-0.0-0.5	AROCLOR 1254	J	1.1	1.9	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-329-SA5B-SS-0.0-0.5	2,4,5-T	J	0.092	0.18	PQL	ug/Kg	J (all detects)
SL-332-SA5B-SS-0.0-0.5	2,4-DB	J	0.72	1.8	PQL	ug/Kg	J (all detects)
SL-333-SA5B-SS-0.0-0.5	MCPA	J	130	270	PQL	ug/Kg	J (all detects)
SL-334-SA5B-SS-0.0-0.5	2,4-DB	J	0.78	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-315-SA5B-SB-3.0-4.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE O-XYLENE	J J J J	0.40 1.5 0.97 0.19	4.4 4.4 4.4 4.4	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)
SL-319-SA5B-SB-4.0-5.0	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.12 0.36 0.59	4.4 4.4 4.4	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-326-SA5B-SB-14.0-15	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.07 0.23 0.67	3.9 3.9 3.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-326-SA5B-SB-18.5-19.5	ETHYLBENZENE m,p-Xylene METHYLENE CHLORIDE	J J J	0.09 0.30 1.1	4.9 4.9 4.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-326-SA5B-SB-9.0-10.0	ACETONE METHYLENE CHLORIDE	J J	7.9 0.90	9.1 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	BENZO(B)FLUORANTHENE	J	21	180	PQL	ug/Kg	J (all detects)
SL-321-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	58	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	45	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	47	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	59	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	27	180	PQL	ug/Kg	
	CHRYSENE	J	70	180	PQL	ug/Kg	
	FLUORANTHENE	J	92	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	30	180	PQL	ug/Kg	
	PHENANTHRENE	J	65	180	PQL	ug/Kg	
	PYRENE	J	100	180	PQL	ug/Kg	
SL-330-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	27	170	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	18	170	PQL	ug/Kg	
	Dimethylphthalate	J	61	170	PQL	ug/Kg	
	PYRENE	J	18	170	PQL	ug/Kg	
SL-332-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	97	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	120	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	150	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	48	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	62	180	PQL	ug/Kg	
	CHRYSENE	J	130	180	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	19	180	PQL	ug/Kg	
	FLUORANTHENE	J	30	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	45	180	PQL	ug/Kg	
	PYRENE	J	75	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP-024-QC-021011	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.87	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.72	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	19	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.5	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.2	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-315-SA5B-SB-3.0-4.0	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.6	19	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	6.5	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-319-SA5B-SB-4.0-5.0	BENZO(A)PYRENE	J	5.1	8.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	6.5	8.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	4.3	8.9	PQL	ug/Kg	
	CHRYSENE	J	7.9	8.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	38	96	PQL	ug/Kg	
	FLUORANTHENE	J	3.7	8.9	PQL	ug/Kg	
	PYRENE	J	5.2	8.9	PQL	ug/Kg	
SL-322-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	32	95	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	3.6	8.8	PQL	ug/Kg	
	Dimethylphthalate	J	39	95	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	6.2	8.8	PQL	ug/Kg	
SL-326-SA5B-SB-14.0-15	BENZO(A)PYRENE	J	1.2	2.0	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.7	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.5	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	
	FLUORANTHENE	J	0.86	2.0	PQL	ug/Kg	
SL-326-SA5B-SB-18.5-19.5	BENZO(A)PYRENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	20	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-326-SA5B-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.6	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.5	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.4	20	PQL	ug/Kg	
SL-329-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.47	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.9	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.99	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.3	19	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-330-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	4.1	8.7	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	7.7	8.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	34	94	PQL	ug/Kg	
	FLUORANTHENE	J	6.5	8.7	PQL	ug/Kg	
SL-331-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	5.1	8.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	5.9	8.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.8	8.8	PQL	ug/Kg	
	CHRYSENE	J	5.2	8.8	PQL	ug/Kg	
	FLUORANTHENE	J	4.7	8.8	PQL	ug/Kg	
	PYRENE	J	6.9	8.8	PQL	ug/Kg	
SL-333-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.89	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.83	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.89	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.8	19	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	PYRENE	J	1.3	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE080 **Laboratory: LL**

EDD Filename: DE080_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-334-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	7.3	9.4	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	6.5	9.4	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	65	100	PQL	ug/Kg	
	Di-n-octylphthalate	J	35	100	PQL	ug/Kg	
	PHENANTHRENE	J	5.1	9.4	PQL	ug/Kg	
	PYRENE	J	6.5	9.4	PQL	ug/Kg	
SL-335-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	0.86	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.3	20	PQL	ug/Kg	
	CHRYSENE	J	0.64	1.8	PQL	ug/Kg	

LDC #: 25764D4

SDG #: DE080

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

ADR

Date: 2/6/11

Page: 1 of 1

Reviewer: CR

2nd Reviewer: C

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, P, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Be, Co, Mo, Se, Ag, As <5xRL)
VIII.	Laboratory Control Samples (LCS)	A NT	LCS (As out by difference)
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	CO: 13% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=2

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	DUP-024-QC-021011 D	11	SL-330-SA5B-SS-0.0-0.5	21		31	
2	EB31-SA5B-021011 ✓	12	SL-331-SA5B-SS-0.0-0.5	22		32	
3	SL-315-SA5B-SB-3.0-4.0	13	SL-332-SA5B-SS-0.0-0.5	23		33	
4	SL-319-SA5B-SB-4.0-5.0	14	SL-333-SA5B-SS-0.0-0.5 D	24		34	
5	SL-321-SA5B-SS-0.0-0.5	15	SL-334-SA5B-SS-0.0-0.5	25		35	
6	SL-322-SA5B-SS-0.0-0.5	16	SL-335-SA5B-SS-0.0-0.5	26		36	
7	SL-326-SA5B-SB-14.0-15.0	17	SL-333-SA5B-SS-0.0-0.5MS	27		37	
8	SL-326-SA5B-SB-18.5-19.5	18	SL-333-SA5B-SS-0.0-0.5MSD	28		38	
9	SL-326-SA5B-SB-9.0-10.0	19	SL-333-SA5B-SS-0.0-0.5DUP	29		39	
10	SL-329-SA5B-SS-0.0-0.5	20		30		40	

Notes: _____

SAMPLE DELIVERY GROUP

DE081

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-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3060A	7199	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3550B	8081A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3550B	8082	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3550B	8151A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3550B	8270C	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	3550B	8270C SIM	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	Gen Prep	300.0	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	Gen Prep	9045M	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	METHOD	314.0	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5	6205493	N	METHOD	7471A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D220607	DUP	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D220932A	DUP	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D220932B	DUP	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D220932D	DUP	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D221047	DUP	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D221145	DUP	METHOD	7471A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D222324C	DUP	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D270422A	DUP	METHOD	314.0	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D272255A	DUP	Gen Prep	300.0	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5DUP	P205493D291000A	DUP	Gen Prep	9045M	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M220614	MSD	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M220938A	MSD	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M220938B	MSD	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M220938D	MSD	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
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M221054	MSD	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M221147	MSD	METHOD	7471A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M222008C	MSD	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M241044A	MSD	3550B	8151A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MSD	P205493M260858	MSD	3550B	8270C	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R220611	MS	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R220935A	MS	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R220935B	MS	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R220935D	MS	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R221050	MS	3050B	6010B	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R221146	MS	METHOD	7471A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R222006C	MS	3050B	6020	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R241016A	MS	3550B	8151A	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R260833	MS	3550B	8270C	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R270446A	MS	METHOD	314.0	III
11-Feb-2011	SL-049-SA5B-SS-0.0-0.5MS	P205493R272309A	MS	Gen Prep	300.0	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3050B	6010B	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3050B	6020	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3060A	7199	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3550B	8081A	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3550B	8082	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3550B	8151A	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3550B	8270C	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	3550B	8270C SIM	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	Gen Prep	300.0	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	Gen Prep	9045M	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
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	METHOD	314.0	III
11-Feb-2011	SL-289-SA5B-SS-0.0-0.5	6205499	N	METHOD	7471A	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3050B	6010B	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3050B	6020	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3060A	7199	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3550B	8081A	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3550B	8082	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3550B	8151A	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3550B	8270C	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	3550B	8270C SIM	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	Gen Prep	300.0	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	Gen Prep	9045M	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	METHOD	314.0	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	METHOD	6850	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5	6205494	N	METHOD	7471A	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5MSD	P205494M241956A	MSD	3550B	8081A	III
11-Feb-2011	SL-138-SA5B-SS-0.0-0.5MS	P205494R241942A	MS	3550B	8081A	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3050B	6010B	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3050B	6020	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3060A	7199	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3550B	8081A	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3550B	8082	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3550B	8151A	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3550B	8270C	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	3550B	8270C SIM	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	Gen Prep	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
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	Gen Prep	9045M	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	METHOD	314.0	III
11-Feb-2011	SL-144-SA5B-SS-0.0-0.5	6205496	N	METHOD	7471A	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3050B	6010B	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3050B	6020	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3060A	7199	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3550B	8081A	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3550B	8082	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3550B	8151A	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3550B	8270C	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	3550B	8270C SIM	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	Gen Prep	300.0	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	Gen Prep	9045M	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	METHOD	314.0	III
11-Feb-2011	SL-254-SA5B-SS-0.0-0.5	6205498	N	METHOD	7471A	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3050B	6010B	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3050B	6020	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3060A	7199	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3550B	8081A	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3550B	8082	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3550B	8151A	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3550B	8270C	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	3550B	8270C SIM	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	Gen Prep	300.0	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	Gen Prep	9045M	III
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	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
11-Feb-2011	SL-253-SA5B-SS-0.0-0.5	6205497	N	METHOD	7471A	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3050B	6010B	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3050B	6020	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3060A	7199	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3550B	8081A	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3550B	8082	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3550B	8151A	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3550B	8270C	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	3550B	8270C SIM	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	Gen Prep	300.0	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	Gen Prep	9045M	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	METHOD	314.0	III
11-Feb-2011	SL-141-SA5B-SS-0.0-0.5	6205495	N	METHOD	7471A	III
14-Feb-2011	TB-021411	6205502	TB	5030B	8015M	III
14-Feb-2011	TB-021411	6205502	TB	5030B	8260B	III
14-Feb-2011	TB-021411	6205502	TB	5030B	8260B SIM	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3050B	6010B	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3050B	6020	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3060A	7199	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3546	1625C	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3550B	8015B	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3550B	8015M	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3550B	8082	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3550B	8270C	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	3550B	8270C SIM	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	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
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	5035	8260B	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	5035	8260B SIM	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	8330	8330A	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	Gen Prep	300.0	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	Gen Prep	9045M	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	METHOD	314.0	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	METHOD	7471A	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	METHOD	8015B	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	METHOD	8015M	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	METHOD	8315A	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0	6205500	N	METHOD	9012B	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0MSD	P205500M322247A	MSD	3550B	8015B	III
14-Feb-2011	SL-324-SA5B-SB-4.0-5.0MS	P205500R322202A	MS	3550B	8015B	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3050B	6010B	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3050B	6020	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3060A	7199	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3546	1625C	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3550B	8015B	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3550B	8015M	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3550B	8082	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3550B	8270C	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	3550B	8270C SIM	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	5035	8015M	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	5035	8260B	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	5035	8260B SIM	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	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
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	Gen Prep	300.0	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	Gen Prep	9045M	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	314.0	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	6850	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	7471A	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	8015B	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	8015M	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	8315A	III
14-Feb-2011	SL-324-SA5B-SB-8.0-9.0	6205501	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-049-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.49	J	0.906	MDL	5.09	PQL	mg/Kg	J	Z
CALCIUM	9610		6.24	MDL	20.4	PQL	mg/Kg	J	E, E
MAGNESIUM	800		2.58	MDL	10.2	PQL	mg/Kg	J	Q
PHOSPHORUS	452		0.570	MDL	10.2	PQL	mg/Kg	J	E
SODIUM	56.5	J	38.0	MDL	102	PQL	mg/Kg	J	Z
STRONTIUM	18.4		0.0631	MDL	0.509	PQL	mg/Kg	J	E
TIN	1.75	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
TITANIUM	172		0.387	MDL	1.02	PQL	mg/Kg	J	Q
Zirconium	2.48	J	0.855	MDL	5.09	PQL	mg/Kg	U	B

Sample ID: **SL-138-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.91	J	0.952	MDL	5.35	PQL	mg/Kg	J	Z
CALCIUM	4520		6.55	MDL	21.4	PQL	mg/Kg	J	E, E
MAGNESIUM	4810		2.72	MDL	10.7	PQL	mg/Kg	J	Q
PHOSPHORUS	508		0.599	MDL	10.7	PQL	mg/Kg	J	E
STRONTIUM	16.3		0.0663	MDL	0.535	PQL	mg/Kg	J	E
TIN	3.48	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1060		0.406	MDL	1.07	PQL	mg/Kg	J	Q
Zirconium	1.38	J	0.898	MDL	5.35	PQL	mg/Kg	U	B

Sample ID: **SL-141-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 2:11:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.59	J	0.937	MDL	5.27	PQL	mg/Kg	J	Z
CALCIUM	3290		6.46	MDL	21.1	PQL	mg/Kg	J	E, E
MAGNESIUM	4890		2.67	MDL	10.5	PQL	mg/Kg	J	Q
PHOSPHORUS	295		0.590	MDL	10.5	PQL	mg/Kg	J	E
SODIUM	83.9	J	39.3	MDL	105	PQL	mg/Kg	J	Z
STRONTIUM	29.1		0.0653	MDL	0.527	PQL	mg/Kg	J	E
TIN	2.51	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
TITANIUM	1220		0.400	MDL	1.05	PQL	mg/Kg	J	Q
Zirconium	2.49	J	0.885	MDL	5.27	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.11	J	0.941	MDL	5.29	PQL	mg/Kg	J	Z
CALCIUM	3130		6.48	MDL	21.2	PQL	mg/Kg	J	E, E
MAGNESIUM	3790		2.69	MDL	10.6	PQL	mg/Kg	J	Q
PHOSPHORUS	391		0.592	MDL	10.6	PQL	mg/Kg	J	E
STRONTIUM	14.5		0.0656	MDL	0.529	PQL	mg/Kg	J	E
TIN	2.64	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
TITANIUM	901		0.402	MDL	1.06	PQL	mg/Kg	J	Q
Zirconium	1.64	J	0.889	MDL	5.29	PQL	mg/Kg	U	B

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 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
BORON	3.95	J	0.926	MDL	5.20	PQL	mg/Kg	J	Z
CALCIUM	2910		6.38	MDL	20.8	PQL	mg/Kg	J	E, E
MAGNESIUM	4240		2.64	MDL	10.4	PQL	mg/Kg	J	Q
PHOSPHORUS	281		0.583	MDL	10.4	PQL	mg/Kg	J	E
SODIUM	89.8	J	38.8	MDL	104	PQL	mg/Kg	J	Z
STRONTIUM	29.2		0.0645	MDL	0.520	PQL	mg/Kg	J	E
TIN	2.43	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
TITANIUM	1160		0.395	MDL	1.04	PQL	mg/Kg	J	Q
Zirconium	2.03	J	0.874	MDL	5.20	PQL	mg/Kg	U	B

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.55	J	0.915	MDL	5.14	PQL	mg/Kg	J	Z
CALCIUM	2620		6.30	MDL	20.6	PQL	mg/Kg	J	E, E
MAGNESIUM	4360		2.61	MDL	10.3	PQL	mg/Kg	J	Q
PHOSPHORUS	376		0.576	MDL	10.3	PQL	mg/Kg	J	E
SODIUM	82.7	J	38.3	MDL	103	PQL	mg/Kg	J	Z
STRONTIUM	24.0		0.0637	MDL	0.514	PQL	mg/Kg	J	E
TIN	2.57	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	1130		0.391	MDL	1.03	PQL	mg/Kg	J	Q
Zirconium	2.30	J	0.864	MDL	5.14	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.10	J	0.913	MDL	5.13	PQL	mg/Kg	J	Z
CALCIUM	3210		6.29	MDL	20.5	PQL	mg/Kg	J	E, E
MAGNESIUM	3290		2.61	MDL	10.3	PQL	mg/Kg	J	Q
PHOSPHORUS	510		0.575	MDL	10.3	PQL	mg/Kg	J	E
STRONTIUM	28.9		0.0636	MDL	0.513	PQL	mg/Kg	J	E
TIN	1.97	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
TITANIUM	779		0.390	MDL	1.03	PQL	mg/Kg	J	Q
Zirconium	2.94	J	0.862	MDL	5.13	PQL	mg/Kg	U	B

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.78	J	0.921	MDL	5.18	PQL	mg/Kg	J	Z
CALCIUM	1650		6.34	MDL	20.7	PQL	mg/Kg	J	E, E
MAGNESIUM	3110		2.63	MDL	10.4	PQL	mg/Kg	J	Q
PHOSPHORUS	174		0.580	MDL	10.4	PQL	mg/Kg	J	E
STRONTIUM	11.4		0.0642	MDL	0.518	PQL	mg/Kg	J	E
TIN	2.39	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
TITANIUM	871		0.393	MDL	1.04	PQL	mg/Kg	J	Q

Sample ID: **SL-324-SA5B-SB-8.0-9.0** ***Collected:*** **2/14/2011 2:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	1.71	J	0.937	MDL	5.27	PQL	mg/Kg	J	Z
CALCIUM	6580		6.46	MDL	21.1	PQL	mg/Kg	J	E, E
MAGNESIUM	4090		2.67	MDL	10.5	PQL	mg/Kg	J	Q
PHOSPHORUS	343		0.590	MDL	10.5	PQL	mg/Kg	J	E
STRONTIUM	18.5		0.0653	MDL	0.527	PQL	mg/Kg	J	E
TITANIUM	983		0.400	MDL	1.05	PQL	mg/Kg	J	Q
Zirconium	1.07	J	0.885	MDL	5.27	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-049-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 8:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.154	J	0.0403	MDL	0.403	PQL	mg/Kg	J	Z

Sample ID: SL-049-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 8:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	20.6		0.109	MDL	0.403	PQL	mg/Kg	J	E

Sample ID: SL-049-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 8:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.112	J	0.0605	MDL	0.202	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0873	J	0.0403	MDL	0.101	PQL	mg/Kg	J	Z, Q
CHROMIUM	14.1		0.121	MDL	0.403	PQL	mg/Kg	J	E, A
COBALT	2.75		0.0202	MDL	0.101	PQL	mg/Kg	J	A
COPPER	3.31		0.0665	MDL	0.403	PQL	mg/Kg	J	E
LEAD	1.71		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, E, A
THALLIUM	0.0618	J	0.0302	MDL	0.101	PQL	mg/Kg	J	Z, Q
VANADIUM	16.2		0.0222	MDL	0.101	PQL	mg/Kg	J	E, A

Sample ID: SL-138-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 9:58:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.171	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-138-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 9:58:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	91.5		0.119	MDL	0.441	PQL	mg/Kg	J	E

Sample ID: SL-138-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 9:58:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.595		0.0661	MDL	0.220	PQL	mg/Kg	J	Q
CADMIUM	1.44		0.0441	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	63.3		0.132	MDL	0.441	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-138-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 9:58:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	7.34		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	53.5		0.0727	MDL	0.441	PQL	mg/Kg	J	E
LEAD	36.4		0.0115	MDL	0.220	PQL	mg/Kg	J	Q, E, A
SILVER	0.167		0.0132	MDL	0.110	PQL	mg/Kg	J	Q
THALLIUM	0.282		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	40.4		0.0242	MDL	0.110	PQL	mg/Kg	J	E, A

Sample ID: SL-141-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 2:11:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 2:11:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.113	MDL	0.417	PQL	mg/Kg	J	E

Sample ID: SL-141-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 2:11:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.126	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
CADMIUM	0.263		0.0417	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	24.2		0.125	MDL	0.417	PQL	mg/Kg	J	E, A
COBALT	6.96		0.0209	MDL	0.104	PQL	mg/Kg	J	A
COPPER	11.3		0.0688	MDL	0.417	PQL	mg/Kg	J	E
LEAD	8.71		0.0108	MDL	0.209	PQL	mg/Kg	J	Q, E, A
SILVER	0.0440	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.328		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	46.3		0.0229	MDL	0.104	PQL	mg/Kg	J	E, A

Sample ID: SL-144-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 10:44:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.197	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.2		0.115	MDL	0.427	PQL	mg/Kg	J	E

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.194	J	0.0641	MDL	0.214	PQL	mg/Kg	J	Z, Q
CADMIUM	0.574		0.0427	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	20.5		0.128	MDL	0.427	PQL	mg/Kg	J	E, A
COBALT	6.13		0.0214	MDL	0.107	PQL	mg/Kg	J	A
COPPER	13.9		0.0705	MDL	0.427	PQL	mg/Kg	J	E
LEAD	21.6		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E, A
SILVER	0.233		0.0128	MDL	0.107	PQL	mg/Kg	J	Q
THALLIUM	0.266		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	39.3		0.0235	MDL	0.107	PQL	mg/Kg	J	E, A

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0408	MDL	0.408	PQL	mg/Kg	J	Z

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.110	MDL	0.408	PQL	mg/Kg	J	E

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:55:00** ***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	0.0612	MDL	0.204	PQL	mg/Kg	J	Z, Q
CADMIUM	0.334		0.0408	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	22.0		0.122	MDL	0.408	PQL	mg/Kg	J	E, A
COBALT	7.45		0.0204	MDL	0.102	PQL	mg/Kg	J	A
COPPER	12.9		0.0674	MDL	0.408	PQL	mg/Kg	J	E
LEAD	8.29		0.0106	MDL	0.204	PQL	mg/Kg	J	Q, E, A
SILVER	0.0380	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.353		0.0306	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0225	MDL	0.102	PQL	mg/Kg	J	E, A

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.198	J	0.0407	MDL	0.407	PQL	mg/Kg	J	Z

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	159		0.110	MDL	0.407	PQL	mg/Kg	J	E

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.154	J	0.0611	MDL	0.204	PQL	mg/Kg	J	Z, Q
CADMIUM	0.348		0.0407	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	26.6		0.122	MDL	0.407	PQL	mg/Kg	J	E, A
COBALT	8.22		0.0204	MDL	0.102	PQL	mg/Kg	J	A
COPPER	14.3		0.0672	MDL	0.407	PQL	mg/Kg	J	E
LEAD	11.5		0.0106	MDL	0.204	PQL	mg/Kg	J	Q, E, A
SILVER	0.0471	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.336		0.0305	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	50.5		0.0224	MDL	0.102	PQL	mg/Kg	J	E, A

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.353	J	0.0407	MDL	0.407	PQL	mg/Kg	J	Z

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.110	MDL	0.407	PQL	mg/Kg	J	E

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.158	J	0.0610	MDL	0.203	PQL	mg/Kg	J	Z, Q
CADMIUM	0.772		0.0407	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	22.0		0.122	MDL	0.407	PQL	mg/Kg	J	E, A
COBALT	5.57		0.0203	MDL	0.102	PQL	mg/Kg	J	A
COPPER	9.24		0.0671	MDL	0.407	PQL	mg/Kg	J	E
LEAD	7.65		0.0106	MDL	0.203	PQL	mg/Kg	J	Q, E, A
SILVER	0.0705	J	0.0122	MDL	0.102	PQL	mg/Kg	J	Z, Q
THALLIUM	0.240		0.0305	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	38.0		0.0224	MDL	0.102	PQL	mg/Kg	J	E, A

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.1		0.113	MDL	0.418	PQL	mg/Kg	J	E

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0627	MDL	0.209	PQL	mg/Kg	J	Z, Q
CADMIUM	0.152		0.0418	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	15.6		0.125	MDL	0.418	PQL	mg/Kg	J	E, A
COBALT	5.32		0.0209	MDL	0.105	PQL	mg/Kg	J	A
COPPER	9.26		0.0690	MDL	0.418	PQL	mg/Kg	J	E
LEAD	7.57		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E, A
SILVER	0.0464	J	0.0125	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.347		0.0314	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	35.3		0.0230	MDL	0.105	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.106	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.3		0.113	MDL	0.417	PQL	mg/Kg	J	E

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0626	U	0.0626	MDL	0.209	PQL	mg/Kg	UJ	Q
CADMIUM	0.0708	J	0.0417	MDL	0.104	PQL	mg/Kg	J	Z, Q
CHROMIUM	13.1		0.125	MDL	0.417	PQL	mg/Kg	J	E, A
COBALT	3.80		0.0209	MDL	0.104	PQL	mg/Kg	J	A
COPPER	5.68		0.0688	MDL	0.417	PQL	mg/Kg	J	E
LEAD	7.85		0.0108	MDL	0.209	PQL	mg/Kg	J	Q, E, A
SILVER	3.04		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
THALLIUM	0.232		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	26.0		0.0229	MDL	0.104	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-049-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.59	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-141-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 2:11:00 *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	0.21	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-144-SA5B-SS-0.0-0.5 **Collected:** 2/11/2011 10:44:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.55	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-253-SA5B-SS-0.0-0.5 **Collected:** 2/11/2011 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
HEXAVALENT CHROMIUM	0.76	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-254-SA5B-SS-0.0-0.5 **Collected:** 2/11/2011 1:32:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.66	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-289-SA5B-SS-0.0-0.5 **Collected:** 2/11/2011 9:23:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-324-SA5B-SB-4.0-5.0 **Collected:** 2/14/2011 2:44:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.25	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-141-SA5B-SS-0.0-0.5 **Collected:** 2/11/2011 2:11:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0086	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-144-SA5B-SS-0.0-0.5 **Collected:** 2/11/2011 10:44:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0740	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-289-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 9:23:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0679	J	0.0029	MDL	0.0996	PQL	mg/Kg	J	Z

Sample ID: SL-324-SA5B-SB-4.0-5.0 *Collected:* 2/14/2011 2:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0038	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0047	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *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	137		17.8	MDL	35.7	PQL	ng/Kg	U	B

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *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)	0.62	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-141-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 2:11:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-141-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 2:11:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.57		0.071	MDL	0.37	PQL	ug/Kg	J	S
4,4'-DDT	0.64		0.071	MDL	0.37	PQL	ug/Kg	J	S
ALDRIN	0.071	U	0.071	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.25		0.064	MDL	0.18	PQL	ug/Kg	J	S
Chlordane	0.86	U	0.86	MDL	3.7	PQL	ug/Kg	UJ	S
DELTA-BHC	0.039	U	0.039	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.17	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z, S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.071	U	0.071	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.1	PQL	ug/Kg	UJ	S

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
4,4'-DDT	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	0.88	U	0.88	MDL	3.7	PQL	ug/Kg	UJ	S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	UJ	S
DIELDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.037	U	0.037	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.37	U	0.37	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.073	U	0.073	MDL	0.37	PQL	ug/Kg	UJ	S
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	UJ	S

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.11	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z
DIELDRIN	0.25	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.20	J	0.069	MDL	0.35	PQL	ug/Kg	J	Z
MIREX	0.19	J	0.069	MDL	0.35	PQL	ug/Kg	J	Z

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
4,4'-DDT	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
BETA-BHC	0.063	U	0.063	MDL	0.18	PQL	ug/Kg	UJ	S
Chlordane	0.85	U	0.85	MDL	3.6	PQL	ug/Kg	UJ	S
DELTA-BHC	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	UJ	S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
DIELDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.063	U	0.063	MDL	0.18	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	S
MIREX	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	UJ	S

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-049-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 8:50:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L

Sample ID: **SL-138-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **50**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
AROCLOR 1248	200		18	MDL	94	PQL	ug/Kg	J	L
AROCLOR 1254	240		18	MDL	94	PQL	ug/Kg	J	L
AROCLOR 1260	120		21	MDL	94	PQL	ug/Kg	J	L
Aroclor 5432	55	U	55	MDL	180	PQL	ug/Kg	UJ	L
Aroclor 5442	55	U	55	MDL	180	PQL	ug/Kg	UJ	L
Aroclor 5460	650		55	MDL	180	PQL	ug/Kg	J	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-141-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 2:11:00 ***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 1254	0.40	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, L
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-144-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 10:44:00 ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-253-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: SL-254-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 1:32:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L
Aroclor 5460	1.0	U	1.0	MDL	3.4	PQL	ug/Kg	UJ	L

Sample ID: SL-289-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 9:23:00 ***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 1254	1.6	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, L
AROCLOR 1260	0.49	J	0.41	MDL	1.8	PQL	ug/Kg	J	Z, L
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-324-SA5B-SB-4.0-5.0 *Collected:* 2/14/2011 2:44:00 *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	0.79	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, L
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-324-SA5B-SB-8.0-9.0 *Collected:* 2/14/2011 2:52:00 *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	0.71	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, L
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-049-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 8:50:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	87	J	78	MDL	260	PQL	ug/Kg	J	Z

Sample ID: SL-138-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 9:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	J	0.88	MDL	2.6	PQL	ug/Kg	J	Z

Sample ID: SL-141-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 2:11:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	110	J	81	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-144-SA5B-SS-0.0-0.5 *Collected:* 2/11/2011 10:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPA	160	J	84	MDL	280	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-144-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 10:44:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MCPP	100	J	83	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-253-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 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
MCPP	140	J	79	MDL	260	PQL	ug/Kg	J	Z

Sample ID: SL-289-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 9:23:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.17	J	0.079	MDL	0.18	PQL	ug/Kg	J	Z
MCPP	130	J	79	MDL	260	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-138-SA5B-SS-0.0-0.5 ***Collected:*** 2/11/2011 9:58:00 ***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	22	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	32	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	150	J	18	MDL	370	PQL	ug/Kg	J	Z
Butylbenzylphthalate	160	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	31	J	18	MDL	180	PQL	ug/Kg	J	Z
Di-n-butylphthalate	60	J	18	MDL	180	PQL	ug/Kg	J	Z
Di-n-octylphthalate	110	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	38	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	35	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-141-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 2:11:00** ***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	33	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***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	46	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-253-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***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	25	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***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	24	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***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	21	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-324-SA5B-SB-8.0-9.0** ***Collected:*** **2/14/2011 2:52:00** ***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	23	J	18	MDL	350	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-049-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 8:50:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	19		6.2	MDL	19	PQL	ug/Kg	U	B

Sample ID: **SL-138-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:58:00** ***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	0.85	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-141-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 2:11:00** ***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	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-144-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 10:44:00** ***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	0.82	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.86	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.76	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.78	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.81	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-254-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 1:32:00** ***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(K)FLUORANTHENE	1.2	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.72	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: **SL-289-SA5B-SS-0.0-0.5** ***Collected:*** **2/11/2011 9:23:00** ***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	0.72	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***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(B)FLUORANTHENE	0.85	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.74	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-324-SA5B-SB-8.0-9.0** ***Collected:*** **2/14/2011 2:52:00** ***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	0.48	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-324-SA5B-SB-4.0-5.0** ***Collected:*** **2/14/2011 2:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ETHYLBENZENE	0.09	J	0.06	MDL	4.3	PQL	ug/Kg	J	Z
m,p-Xylene	0.25	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.81	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: **SL-324-SA5B-SB-8.0-9.0** ***Collected:*** **2/14/2011 2:52:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
METHYLENE CHLORIDE	0.76	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE081

Method Blank Outlier Report

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLE05B261127	2/28/2011 11:27:00 AM	N-NITROSODIMETHYLAMINE	43.4 ng/Kg	SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-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
SL-324-SA5B-SB-8.0-9.0(RES)	N-NITROSODIMETHYLAMINE	137 ng/Kg	137U ng/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04608AB220549	2/16/2011 5:49:00 AM	ALUMINUM CALCIUM PHOSPHORUS STRONTIUM TIN	6.43 mg/Kg 15.9 mg/Kg 0.827 mg/Kg 0.0810 mg/Kg 1.36 mg/Kg	SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-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
SL-049-SA5B-SS-0.0-0.5(RES)	TIN	1.75 mg/Kg	1.75U mg/Kg
SL-138-SA5B-SS-0.0-0.5(RES)	TIN	3.48 mg/Kg	3.48U mg/Kg
SL-141-SA5B-SS-0.0-0.5(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-144-SA5B-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-253-SA5B-SS-0.0-0.5(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-254-SA5B-SS-0.0-0.5(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-289-SA5B-SS-0.0-0.5(RES)	TIN	1.97 mg/Kg	1.97U mg/Kg
SL-324-SA5B-SB-4.0-5.0(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB72B211232A	2/16/2011 12:32:00 PM	METHYLENE CHLORIDE TOLUENE	0.45 ug/Kg 0.14 ug/Kg	SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-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
SL-324-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	4.3U ug/Kg
SL-324-SA5B-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	0.76 ug/Kg	4.1U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE081 | **Laboratory: LL**

EDD Filename: DE081_v1 | **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLI05B261944	2/23/2011 7:44:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	7.0 ug/Kg 6.2 ug/Kg	SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-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
SL-049-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	19U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_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-049-SA5B-SS-0.0-0.5MS **SL-049-SA5B-SS-0.0-0.5MSD** (SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-SB-8.0-9.0)	CADMIUM LEAD SILVER THALLIUM	129 127 129 129	136 127 - 129	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	CADMIUM LEAD SILVER THALLIUM	J (all detects)
SL-049-SA5B-SS-0.0-0.5MS **SL-049-SA5B-SS-0.0-0.5MSD** (SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-SB-8.0-9.0)	ANTIMONY	74	66	75.00-125.00	-	ANTIMONY	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-049-SA5B-SS-0.0-0.5MS **SL-049-SA5B-SS-0.0-0.5MSD** (SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-SB-8.0-9.0)	ALUMINUM IRON MAGNESIUM TITANIUM	829 126 140 182	891 198 143 201	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM IRON MAGNESIUM TITANIUM	J(all detects) Al, Fe No Qual, >4x
SL-049-SA5B-SS-0.0-0.5MS **SL-049-SA5B-SS-0.0-0.5MSD** (SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-SB-8.0-9.0)	PHOSPHORUS	1	-24	75.00-125.00	-	PHOSPHORUS	No Qual, >4x
SL-049-SA5B-SS-0.0-0.5MS **SL-049-SA5B-SS-0.0-0.5MSD** (SL-049-SA5B-SS-0.0-0.5 SL-138-SA5B-SS-0.0-0.5 SL-141-SA5B-SS-0.0-0.5 SL-144-SA5B-SS-0.0-0.5 SL-253-SA5B-SS-0.0-0.5 SL-254-SA5B-SS-0.0-0.5 SL-289-SA5B-SS-0.0-0.5 SL-324-SA5B-SB-4.0-5.0 SL-324-SA5B-SB-8.0-9.0)	CALCIUM	141	732	75.00-125.00	21 (20.00)	CALCIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-138-SA5B-SS-0.0-0.5MS **SL-138-SA5B-SS-0.0-0.5MSD** (SL-138-SA5B-SS-0.0-0.5)	4,4'-DDT	208	215	10.00-176.00	-	4,4'-DDT	No Qual Diluted Out
SL-138-SA5B-SS-0.0-0.5MS **SL-138-SA5B-SS-0.0-0.5MSD** (SL-138-SA5B-SS-0.0-0.5)	ENDOSULFAN I ENDRIN HEPTACHLOR EPOXIDE	- 0 -	0 0 0	16.00-137.00 11.00-149.00 13.00-157.00	200 (50.00) - 200 (50.00)	ENDOSULFAN I ENDRIN HEPTACHLOR EPOXIDE	No Qual Diluted Out

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-049-SA5B-SS-0.0-0.5DUP	Nitrate-NO3	200	20.00	
(SL-049-SA5B-SS-0.0-0.5				
SL -138-SA5B-SS-0.0-0.5				
SL -141-SA5B-SS-0.0-0.5				
SL -144-SA5B-SS-0.0-0.5				No Qual
SL -253-SA5B-SS-0.0-0.5				OK by difference
SL -254-SA5B-SS-0.0-0.5				
SL -289-SA5B-SS-0.0-0.5				
SL -324-SA5B-SB-4.0-5.0				
SL -324-SA5B-SB-8.0-9.0)				

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-049-SA5B-SS-0.0-0.5DUP	BORON	25	20.00	
(SL-049-SA5B-SS-0.0-0.5	CALCIUM	109	20.00	
SL -138-SA5B-SS-0.0-0.5	PHOSPHORUS	43	20.00	
SL -141-SA5B-SS-0.0-0.5	SODIUM	98	20.00	
SL -144-SA5B-SS-0.0-0.5	STRONTIUM	94	20.00	J(all detects)
SL -253-SA5B-SS-0.0-0.5				UJ(all non-detects)
SL -254-SA5B-SS-0.0-0.5				
SL -289-SA5B-SS-0.0-0.5				B, Na No Qual
SL -324-SA5B-SB-4.0-5.0				OK by difference
SL -324-SA5B-SB-8.0-9.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-049-SA5B-SS-0.0-0.5DUP	BARIUM	28	20.00	
(SL-049-SA5B-SS-0.0-0.5	CADMIUM	36	20.00	
SL -138-SA5B-SS-0.0-0.5	CHROMIUM	32	20.00	
SL -141-SA5B-SS-0.0-0.5	COPPER	22	20.00	
SL -144-SA5B-SS-0.0-0.5	LEAD	23	20.00	J(all detects)
SL -253-SA5B-SS-0.0-0.5	VANADIUM	32	20.00	UJ(all non-detects)
SL -254-SA5B-SS-0.0-0.5	ZINC	22	20.00	
SL -289-SA5B-SS-0.0-0.5				Cd, Zn No Qual
SL -324-SA5B-SB-4.0-5.0				OK by difference
SL -324-SA5B-SB-8.0-9.0)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_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
P10528AQ240851A (SL-049-SA5B-SS-0.0-0.5 SL -138-SA5B-SS-0.0-0.5 SL -141-SA5B-SS-0.0-0.5 SL -144-SA5B-SS-0.0-0.5 SL -253-SA5B-SS-0.0-0.5 SL -254-SA5B-SS-0.0-0.5 SL -289-SA5B-SS-0.0-0.5 SL -324-SA5B-SB-4.0-5.0 SL -324-SA5B-SB-8.0-9.0)	AROCLOR 1016 AROCLOR 1260	207 235	- -	72.00-120.00 65.00-137.00	- -	AROCLOR 1016, 1221, 1232 AROCLOR 1242, 1248, 1254, 1260	J (all detects)
P10528AQ240929A **P10528AY240910A** (SL-049-SA5B-SS-0.0-0.5 SL -138-SA5B-SS-0.0-0.5 SL -141-SA5B-SS-0.0-0.5 SL -144-SA5B-SS-0.0-0.5 SL -253-SA5B-SS-0.0-0.5 SL -254-SA5B-SS-0.0-0.5 SL -289-SA5B-SS-0.0-0.5 SL -324-SA5B-SB-4.0-5.0 SL -324-SA5B-SB-8.0-9.0)	Aroclor 5442	57	70	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10537AQ240255A (SL-324-SA5B-SB-4.0-5.0 SL -324-SA5B-SB-8.0-9.0)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-141-SA5B-SS-0.0-0.5	TETRACHLORO-M-XYLENE	42	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SL-144-SA5B-SS-0.0-0.5	TETRACHLORO-M-XYLENE	49	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-289-SA5B-SS-0.0-0.5	TETRACHLORO-M-XYLENE	44	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5B-SS-0.0-0.5	BORON	J	1.49	5.09	PQL	mg/Kg	J (all detects)
	SODIUM	J	56.5	102	PQL	mg/Kg	
	TIN	J	1.75	10.2	PQL	mg/Kg	
	Zirconium	J	2.48	5.09	PQL	mg/Kg	
SL-138-SA5B-SS-0.0-0.5	BORON	J	2.91	5.35	PQL	mg/Kg	J (all detects)
	TIN	J	3.48	10.7	PQL	mg/Kg	
	Zirconium	J	1.38	5.35	PQL	mg/Kg	
SL-141-SA5B-SS-0.0-0.5	BORON	J	3.59	5.27	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.9	105	PQL	mg/Kg	
	TIN	J	2.51	10.5	PQL	mg/Kg	
	Zirconium	J	2.49	5.27	PQL	mg/Kg	
SL-144-SA5B-SS-0.0-0.5	BORON	J	3.11	5.29	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.6	PQL	mg/Kg	
	Zirconium	J	1.64	5.29	PQL	mg/Kg	
SL-253-SA5B-SS-0.0-0.5	BORON	J	3.95	5.20	PQL	mg/Kg	J (all detects)
	SODIUM	J	89.8	104	PQL	mg/Kg	
	TIN	J	2.43	10.4	PQL	mg/Kg	
	Zirconium	J	2.03	5.20	PQL	mg/Kg	
SL-254-SA5B-SS-0.0-0.5	BORON	J	3.55	5.14	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.7	103	PQL	mg/Kg	
	TIN	J	2.57	10.3	PQL	mg/Kg	
	Zirconium	J	2.30	5.14	PQL	mg/Kg	
SL-289-SA5B-SS-0.0-0.5	BORON	J	3.10	5.13	PQL	mg/Kg	J (all detects)
	TIN	J	1.97	10.3	PQL	mg/Kg	
	Zirconium	J	2.94	5.13	PQL	mg/Kg	
SL-324-SA5B-SB-4.0-5.0	BORON	J	1.78	5.18	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.4	PQL	mg/Kg	
SL-324-SA5B-SB-8.0-9.0	BORON	J	1.71	5.27	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.07	5.27	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5B-SS-0.0-0.5	ANTIMONY	J	0.112	0.202	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0873	0.101	PQL	mg/Kg	
	SELENIUM	J	0.154	0.403	PQL	mg/Kg	
	THALLIUM	J	0.0618	0.101	PQL	mg/Kg	
SL-138-SA5B-SS-0.0-0.5	SELENIUM	J	0.171	0.441	PQL	mg/Kg	J (all detects)
SL-141-SA5B-SS-0.0-0.5	ANTIMONY	J	0.126	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.139	0.417	PQL	mg/Kg	
	SILVER	J	0.0440	0.104	PQL	mg/Kg	
SL-144-SA5B-SS-0.0-0.5	ANTIMONY	J	0.194	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.197	0.427	PQL	mg/Kg	
SL-253-SA5B-SS-0.0-0.5	ANTIMONY	J	0.135	0.204	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.163	0.408	PQL	mg/Kg	
	SILVER	J	0.0380	0.102	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-254-SA5B-SS-0.0-0.5	ANTIMONY	J	0.154	0.204	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.198	0.407	PQL	mg/Kg	
	SILVER	J	0.0471	0.102	PQL	mg/Kg	
SL-289-SA5B-SS-0.0-0.5	ANTIMONY	J	0.158	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.353	0.407	PQL	mg/Kg	
	SILVER	J	0.0705	0.102	PQL	mg/Kg	
SL-324-SA5B-SB-4.0-5.0	ANTIMONY	J	0.105	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.164	0.418	PQL	mg/Kg	
	SILVER	J	0.0464	0.105	PQL	mg/Kg	
SL-324-SA5B-SB-8.0-9.0	CADMIUM	J	0.0708	0.104	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.106	0.417	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.0	PQL	mg/Kg	J (all detects)
SL-141-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-144-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.55	1.1	PQL	mg/Kg	J (all detects)
SL-253-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.76	1.1	PQL	mg/Kg	J (all detects)
SL-254-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.0	PQL	mg/Kg	J (all detects)
SL-289-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-324-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.25	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-141-SA5B-SS-0.0-0.5	MERCURY	J	0.0086	0.103	PQL	mg/Kg	J (all detects)
SL-144-SA5B-SS-0.0-0.5	MERCURY	J	0.0740	0.107	PQL	mg/Kg	J (all detects)
SL-289-SA5B-SS-0.0-0.5	MERCURY	J	0.0679	0.0996	PQL	mg/Kg	J (all detects)
SL-324-SA5B-SB-4.0-5.0	MERCURY	J	0.0038	0.105	PQL	mg/Kg	J (all detects)
SL-324-SA5B-SB-8.0-9.0	MERCURY	J	0.0047	0.105	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-324-SA5B-SB-8.0-9.0	EFH (C15-C20)	J	0.62	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-141-SA5B-SS-0.0-0.5	DIELDRIN	J	0.17	0.37	PQL	ug/Kg	J (all detects)
SL-253-SA5B-SS-0.0-0.5	4,4'-DDE DIELDRIN	J J	0.11 0.25	0.36 0.36	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-254-SA5B-SS-0.0-0.5	4,4'-DDE MIREX	J J	0.20 0.19	0.35 0.35	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-141-SA5B-SS-0.0-0.5	AROCLOR 1254	J	0.40	1.8	PQL	ug/Kg	J (all detects)
SL-289-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.6 0.49	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-324-SA5B-SB-4.0-5.0	AROCLOR 1260	J	0.79	1.8	PQL	ug/Kg	J (all detects)
SL-324-SA5B-SB-8.0-9.0	AROCLOR 1260	J	0.71	1.8	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-049-SA5B-SS-0.0-0.5	MCPA	J	87	260	PQL	ug/Kg	J (all detects)
SL-138-SA5B-SS-0.0-0.5	DINOSEB	J	0.88	2.6	PQL	ug/Kg	J (all detects)
SL-141-SA5B-SS-0.0-0.5	MCPP	J	110	270	PQL	ug/Kg	J (all detects)
SL-144-SA5B-SS-0.0-0.5	MCPA MCPP	J J	160 100	280 280	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-253-SA5B-SS-0.0-0.5	MCPP	J	140	260	PQL	ug/Kg	J (all detects)
SL-289-SA5B-SS-0.0-0.5	2,4,5-TP (Silvex) MCPP	J J	0.17 130	0.18 260	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-324-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.09	4.3	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.25	4.3	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.81	4.3	PQL	ug/Kg	
SL-324-SA5B-SB-8.0-9.0	METHYLENE CHLORIDE	J	0.76	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-138-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	22	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	22	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	35	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	32	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	150	370	PQL	ug/Kg	
	Butylbenzylphthalate	J	160	180	PQL	ug/Kg	
	CHRYSENE	J	31	180	PQL	ug/Kg	
	Di-n-butylphthalate	J	60	180	PQL	ug/Kg	
	Di-n-octylphthalate	J	110	180	PQL	ug/Kg	
	FLUORANTHENE	J	38	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	20	180	PQL	ug/Kg	
	PYRENE	J	35	180	PQL	ug/Kg	
SL-141-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	360	PQL	ug/Kg	J (all detects)
SL-144-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	46	360	PQL	ug/Kg	J (all detects)
SL-253-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	350	PQL	ug/Kg	J (all detects)
SL-254-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	350	PQL	ug/Kg	J (all detects)
SL-289-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	350	PQL	ug/Kg	J (all detects)
SL-324-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	360	PQL	ug/Kg	J (all detects)
SL-324-SA5B-SB-8.0-9.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	350	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-138-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	0.77	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
SL-141-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.8	PQL	ug/Kg	
	PYRENE	J	1.1	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE081 **Laboratory: LL**

EDD Filename: DE081_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-144-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.82	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.86	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.3	1.8	PQL	ug/Kg	
	PYRENE	J	0.76	1.8	PQL	ug/Kg	
SL-254-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.78	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.81	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.72	1.7	PQL	ug/Kg	
	PYRENE	J	1.1	1.7	PQL	ug/Kg	
SL-289-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	0.72	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	PYRENE	J	1.6	1.8	PQL	ug/Kg	
SL-324-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.74	1.8	PQL	ug/Kg	
SL-324-SA5B-SB-8.0-9.0	ANTHRACENE	J	0.48	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.8	PQL	ug/Kg	

LDC #: 25764E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/14
SDG #: DE081 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MSD (Al, Ca, Fe, P >4x)
VII.	Duplicate Sample Analysis	N	DUP (B, Cd, Na, Zn <5x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-049-SA5B-SS-0.0-0.5	11	(Al) MS	21		31	
2	SL-138-SA5B-SS-0.0-0.5	12	MSD	22		32	
3	SL-141-SA5B-SS-0.0-0.5	13	DUP	23		33	
4	SL-144-SA5B-SS-0.0-0.5	14		24		34	
5	SL-253-SA5B-SS-0.0-0.5	15		25		35	
6	SL-254-SA5B-SS-0.0-0.5	16		26		36	
7	SL-289-SA5B-SS-0.0-0.5	17		27		37	
8	SL-324-SA5B-SB-4.0-5.0	18		28		38	
9	SL-324-SA5B-SS-8.0-9.0	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25764E4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Sample Concentration units, unless otherwise noted: mg/Kg

Soil preparation factor applied: 100x x MS: 2xdil
Associated Samples: All Reason Code: B

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	9			
Zr			5.8	2.9	2.5	1.4	2.5	1.6	2.0	2.3	2.9	1.1			

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.

SAMPLE DELIVERY GROUP

DE082

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
15-Feb-2011	TB-021511	6206990	TB	5030B	8015M	III
15-Feb-2011	TB-021511	6206990	TB	5030B	8260B	III
15-Feb-2011	TB-021511	6206990	TB	5030B	8260B SIM	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3050B	6010B	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3050B	6020	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3060A	7199	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3546	1625C	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3550B	8015B	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3550B	8015M	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3550B	8082	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3550B	8270C	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	3550B	8270C SIM	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	5035	8015M	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	5035	8260B	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	5035	8260B SIM	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	8330	8330A	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	Gen Prep	300.0	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	Gen Prep	9045M	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	METHOD	314.0	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	METHOD	7471A	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	METHOD	8015B	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	METHOD	8015M	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	METHOD	8315A	III
15-Feb-2011	SL-323-SA5B-SB-4.0-5.0	6206983	N	METHOD	9012B	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3050B	6010B	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	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
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3060A	7199	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3546	1625C	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3550B	8015B	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3550B	8015M	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3550B	8082	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3550B	8270C	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	3550B	8270C SIM	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	5035	8015M	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	5035	8260B	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	5035	8260B SIM	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	8330	8330A	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	Gen Prep	300.0	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	Gen Prep	9045M	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	314.0	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	6850	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	7471A	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	8015B	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	8015M	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	8315A	III
15-Feb-2011	SL-323-SA5B-SB-11.0-12.0	6206982	N	METHOD	9012B	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3005A	6010B	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3020A	6020	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3510C	8015B	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3510C	8015M	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3510C	8082	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3510C	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
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3510C	8270C SIM	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	3520C	1625C	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	5030B	8015M	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	5030B	8260B	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	5030B	8260B SIM	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	8330	8330A	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	Gen Prep	300.0	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	Gen Prep	314.0	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	Gen Prep	7199	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	Gen Prep	8015B	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	Gen Prep	8015M	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	Gen Prep	9040B	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	METHOD	7470A	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	METHOD	8315A	III
15-Feb-2011	EB30-SA5B-021511	6206981	EB	METHOD	9012B	III
15-Feb-2011	EB30-SA5B-021511MSD	P206981M322213A	MSD	Gen Prep	8015M	III
15-Feb-2011	EB30-SA5B-021511MS	P206981R322155A	MS	Gen Prep	8015M	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3050B	6010B	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3050B	6020	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3060A	7199	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3546	1625C	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3550B	8015B	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3550B	8015M	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3550B	8082	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	3550B	8270C	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	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
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	5035	8015M	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	5035	8260B	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	5035	8260B SIM	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	8330	8330A	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	Gen Prep	300.0	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	Gen Prep	9045M	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	METHOD	314.0	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	METHOD	7471A	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	METHOD	8015B	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	METHOD	8015M	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	METHOD	8315A	III
15-Feb-2011	SL-327-SA5B-SB-4.0-5.0	6206984	N	METHOD	9012B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3050B	6010B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3050B	6020	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3060A	7199	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3546	1625C	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3550B	8015B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3550B	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3550B	8082	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3550B	8270C	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	3550B	8270C SIM	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	5035	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	5035	8260B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	5035	8260B SIM	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	8330	8330A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	Gen Prep	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	Gen Prep	9045M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	314.0	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	6850	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	7471A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	8015B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	8315A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0	6206985	N	METHOD	9012B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3050B	6010B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3050B	6020	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3060A	7199	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3546	1625C	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3550B	8015B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3550B	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3550B	8082	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3550B	8270C	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	3550B	8270C SIM	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	5035	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	5035	8260B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	5035	8260B SIM	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	8330	8330A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	Gen Prep	300.0	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	METHOD	314.0	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	METHOD	6850	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	METHOD	7471A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	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
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	METHOD	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	METHOD	8315A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MS	6206986	MS	METHOD	9012B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3050B	6010B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3050B	6020	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3546	1625C	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3550B	8015B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3550B	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3550B	8082	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3550B	8270C	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	3550B	8270C SIM	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	5035	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	5035	8260B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	5035	8260B SIM	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	8330	8330A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	METHOD	6850	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	METHOD	7471A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	METHOD	8015B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	METHOD	8015M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0MSD	6206987	MSD	METHOD	8315A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	3050B	6010B	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	3050B	6020	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	3060A	7199	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	Gen Prep	300.0	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	Gen Prep	9045M	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	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
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	METHOD	7471A	III
15-Feb-2011	SL-329-SA5B-SB-4.0-5.0DUP	6206988	DUP	METHOD	9012B	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3050B	6010B	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3050B	6020	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3060A	7199	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3546	1625C	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3550B	8015B	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3550B	8015M	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3550B	8082	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3550B	8270C	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	3550B	8270C SIM	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	5035	8015M	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	5035	8260B	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	5035	8260B SIM	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	8330	8330A	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	Gen Prep	300.0	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	Gen Prep	9045M	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	METHOD	314.0	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	METHOD	7471A	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	METHOD	8015B	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	METHOD	8015M	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	METHOD	8315A	III
15-Feb-2011	DUP23-SA5B-QC-021511	6206980	FD	METHOD	9012B	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3050B	6010B	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3050B	6020	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	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
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3546	1625C	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3550B	8015B	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3550B	8015M	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3550B	8082	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3550B	8270C	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	3550B	8270C SIM	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	5035	8015M	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	5035	8260B	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	5035	8260B SIM	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	8330	8330A	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	Gen Prep	300.0	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	Gen Prep	9045M	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	314.0	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	6850	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	7471A	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	8015B	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	8015M	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	8315A	III
15-Feb-2011	SL-330-SA5B-SB-4.0-5.0	6206989	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE082 Laboratory: LL

EDD Filename: DE082_v1 eQAPP Name: CDM_SSFL_110509

Method Category: EM

Method: 9040B Matrix: AQ

Sample ID: EB30-SA5B-021511 *Collected:* 2/15/2011 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
PH	5.6		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: DUP23-SA5B-QC-021511 *Collected:* 2/15/2011 2:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.3		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-323-SA5B-SB-11.0-12.0 *Collected:* 2/15/2011 8:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-323-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 8:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	14.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-327-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.4		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-329-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-330-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 3:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: DUP23-SA5B-QC-021511 *Collected:* 2/15/2011 2:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	9.8	U	9.8	MDL	32.7	PQL	ug/Kg	UJ	Q

Sample ID: SL-323-SA5B-SB-11.0-12.0 *Collected:* 2/15/2011 8:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	10	U	10	MDL	33.3	PQL	ug/Kg	UJ	Q

Sample ID: SL-323-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 8:44:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	10.5	U	10.5	MDL	34.9	PQL	ug/Kg	UJ	Q

Sample ID: SL-327-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 11:49:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	9.8	U	9.8	MDL	32.6	PQL	ug/Kg	UJ	Q

Sample ID: SL-329-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 2:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	9.8	U	9.8	MDL	32.7	PQL	ug/Kg	UJ	Q

Sample ID: SL-330-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 3:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	10.1	U	10.1	MDL	33.7	PQL	ug/Kg	UJ	Q

Method Category: METALS

Method: 6010B **Matrix: AQ**

Sample ID: EB30-SA5B-021511 *Collected:* 2/15/2011 10:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	0.0204		0.0024	MDL	0.0200	PQL	mg/L	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	311		0.0842	MDL	0.540	PQL	mg/Kg	J	Q, FD
TIN	2.65	J	1.08	MDL	10.8	PQL	mg/Kg	UJ	B, FD
Zirconium	1.51	J	0.907	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.0		0.24	MDL	2.2	PQL	mg/Kg	J	A
POTASSIUM	3110		19.4	MDL	54.0	PQL	mg/Kg	J	Q

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	233		0.0840	MDL	0.539	PQL	mg/Kg	J	Q
TIN	3.26	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.48	J	0.905	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	21.2		0.24	MDL	2.2	PQL	mg/Kg	J	A
POTASSIUM	3080		19.4	MDL	53.9	PQL	mg/Kg	J	Q

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	473		0.0890	MDL	0.571	PQL	mg/Kg	J	Q
TIN	3.09	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.65	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **REA3** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.6		0.25	MDL	2.3	PQL	mg/Kg	J	A
POTASSIUM	2990		20.5	MDL	57.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **REA2** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	224		0.0830	MDL	0.532	PQL	mg/Kg	J	Q
TIN	2.76	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.06	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **REA3** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	23.7		0.23	MDL	2.1	PQL	mg/Kg	J	A
POTASSIUM	2980		19.2	MDL	53.2	PQL	mg/Kg	J	Q

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **REA2** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	152		0.0851	MDL	0.545	PQL	mg/Kg	J	Q, FD
TIN	14.3		1.09	MDL	10.9	PQL	mg/Kg	J	FD
Zirconium	1.44	J	0.916	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	21.2		0.24	MDL	2.2	PQL	mg/Kg	J	A
POTASSIUM	3050		19.6	MDL	54.5	PQL	mg/Kg	J	Q

Sample ID: **SL-330-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 3:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MANGANESE	273		0.0869	MDL	0.557	PQL	mg/Kg	J	Q
TIN	2.91	J	1.11	MDL	11.1	PQL	mg/Kg	U	B

Sample ID: **SL-330-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 3:58:00** ***Analysis Type:*** **REA3** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	18.9		0.25	MDL	2.2	PQL	mg/Kg	J	A
POTASSIUM	3500		20.0	MDL	55.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	298		1.47	MDL	7.86	PQL	mg/Kg	J	FD

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.148	J	0.0419	MDL	0.419	PQL	mg/Kg	J	Z, Q

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.467		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.834		0.0629	MDL	0.210	PQL	mg/Kg	J	Q, FD
ARSENIC	5.97		0.0839	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.614		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	2.28		0.0419	MDL	0.105	PQL	mg/Kg	J	Q, FD
CHROMIUM	16.5		0.126	MDL	0.419	PQL	mg/Kg	J	Q
COBALT	5.60		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	8.71		0.0692	MDL	0.419	PQL	mg/Kg	J	Q
LEAD	35.4		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, FD
NICKEL	11.5		0.105	MDL	0.419	PQL	mg/Kg	J	Q
SILVER	0.0605	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q, FD
THALLIUM	0.317		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	35.2		0.0231	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **REA2** ***Dilution:*** **20**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	549		0.112	MDL	2.16	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.181	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.52		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	11.8		0.0647	MDL	0.216	PQL	mg/Kg	J	Q
ARSENIC	12.6		0.0862	MDL	0.431	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.773		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.874		0.0431	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.129	MDL	0.431	PQL	mg/Kg	J	Q
COBALT	7.84		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	19.6		0.0711	MDL	0.431	PQL	mg/Kg	J	Q
NICKEL	21.1		0.108	MDL	0.431	PQL	mg/Kg	J	Q
SILVER	0.180		0.0129	MDL	0.108	PQL	mg/Kg	J	Q
THALLIUM	0.392		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	46.5		0.0237	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.140	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.444		0.0565	MDL	0.113	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.234		0.0678	MDL	0.226	PQL	mg/Kg	J	Q
ARSENIC	8.89		0.0904	MDL	0.452	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.05		0.0181	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.218		0.0452	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	41.9		0.136	MDL	0.452	PQL	mg/Kg	J	Q
COBALT	12.3		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, A
COPPER	17.4		0.0746	MDL	0.452	PQL	mg/Kg	J	Q
LEAD	13.3		0.0118	MDL	0.226	PQL	mg/Kg	J	Q
NICKEL	23.7		0.113	MDL	0.452	PQL	mg/Kg	J	Q
SILVER	0.0446	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.476		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	78.3		0.0249	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.448		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.211		0.0632	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	5.96		0.0843	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.657		0.0169	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.189		0.0422	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	19.4		0.126	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	6.31		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	10.1		0.0696	MDL	0.422	PQL	mg/Kg	J	Q
LEAD	7.55		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	11.4		0.105	MDL	0.422	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0565	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.369		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	42.1		0.0232	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.150		0.0432	MDL	0.108	PQL	mg/Kg	J	Q, FD

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.451		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.106	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q, FD
ARSENIC	4.16		0.0864	MDL	0.432	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.676		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	17.4		0.130	MDL	0.432	PQL	mg/Kg	J	Q
COBALT	6.79		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	9.11		0.0713	MDL	0.432	PQL	mg/Kg	J	Q
LEAD	7.94		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, FD
NICKEL	12.8		0.108	MDL	0.432	PQL	mg/Kg	J	Q
SILVER	0.0345	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q, FD
THALLIUM	0.367		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	34.9		0.0238	MDL	0.108	PQL	mg/Kg	J	Q
ZINC	76.3		0.605	MDL	3.24	PQL	mg/Kg	J	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-330-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 3:58:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.258	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z, Q

Sample ID: SL-330-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 3:58:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.509		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-330-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 3:58:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	5.61		0.0891	MDL	0.445	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.803		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.201		0.0445	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	22.8		0.134	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	7.45		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	10.4		0.0735	MDL	0.445	PQL	mg/Kg	J	Q
LEAD	7.48		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
NICKEL	13.7		0.111	MDL	0.445	PQL	mg/Kg	J	Q
SILVER	0.0360	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.392		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	43.8		0.0245	MDL	0.111	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP23-SA5B-QC-021511 ***Collected:*** 2/15/2011 2:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-323-SA5B-SB-11.0-12.0 ***Collected:*** 2/15/2011 8:57:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***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	1.2	PQL	mg/Kg	J	Z

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-330-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 3:58:00** ***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	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0049	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z, FD

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0203	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0116	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-329-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 2:35:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0031	U	0.0031	MDL	0.108	PQL	mg/Kg	UJ	FD

Method Category: SVOA

Method: 1625C **Matrix: AQ**

Sample ID: EB30-SA5B-021511 ***Collected:*** 2/15/2011 10:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	7.79		0.519	MDL	1.04	PQL	ng/L	U	B

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: DUP23-SA5B-QC-021511 ***Collected:*** 2/15/2011 2:51:00 ***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	180	U	180	MDL	360	PQL	ng/Kg	UJ	FD

Sample ID: SL-323-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 8:44:00 ***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	142		19.3	MDL	38.5	PQL	ng/Kg	U	B

Sample ID: SL-329-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 2:35:00 ***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	160		18.2	MDL	36.4	PQL	ng/Kg	UJ	B, FD

Sample ID: SL-330-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 3:58:00 ***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	82.4		18.8	MDL	37.5	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: AQ**

Sample ID: **EB30-SA5B-021511** ***Collected:*** **2/15/2011 10:00:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	10	U	10	MDL	100	PQL	mg/L	UJ	Q

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **REA2** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	4.6	J	2.2	MDL	6.5	PQL	mg/Kg	J	Z, FD
EFH (C21-C30)	53		2.2	MDL	6.5	PQL	mg/Kg	J	FD
EFH (C30-C40)	100		2.2	MDL	6.5	PQL	mg/Kg	J	FD

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***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)	0.44	U	0.44	MDL	1.3	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	2.4		0.44	MDL	1.3	PQL	mg/Kg	J	Q, Q, FD
EFH (C30-C40)	4.7		0.44	MDL	1.3	PQL	mg/Kg	J	Q, Q, FD

Sample ID: **SL-330-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 3:58:00** ***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)	0.64	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.59	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: AQ**

Sample ID: **EB30-SA5B-021511** ***Collected:*** **2/15/2011 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
Aroclor 5432	0.10	U	0.10	MDL	0.50	PQL	ug/L	UJ	L
Aroclor 5442	0.10	U	0.10	MDL	0.50	PQL	ug/L	UJ	L
Aroclor 5460	0.10	U	0.10	MDL	0.50	PQL	ug/L	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory:** LL

EDD Filename: DE082_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP23-SA5B-QC-021511 ***Collected:*** 2/15/2011 2:51:00 ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-323-SA5B-SB-11.0-12.0 ***Collected:*** 2/15/2011 8:57:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	60		0.73	MDL	3.8	PQL	ug/Kg	J	L
Aroclor 5432	2.2	U	2.2	MDL	7.3	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.3	PQL	ug/Kg	UJ	L
Aroclor 5460	7.5		2.2	MDL	7.3	PQL	ug/Kg	J	L

Sample ID: SL-323-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 8:44:00 ***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	2.9		0.45	MDL	2.0	PQL	ug/Kg	J	L
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-327-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 11:49:00 ***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 1254	2.4		0.36	MDL	1.8	PQL	ug/Kg	J	L
AROCLOR 1260	0.54	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z, L
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-329-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 2:35:00 ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory:** LL

EDD Filename: DE082_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-330-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 3:58:00 *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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB30-SA5B-021511 *Collected:* 2/15/2011 10:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-329-SA5B-SB-4.0-5.0 *Collected:* 2/15/2011 2:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	UJ	Q

Method Category: SVOA

Method: 8270C SIM **Matrix:** AQ

Sample ID: EB30-SA5B-021511 *Collected:* 2/15/2011 10:00:00 *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	0.20	J	0.050	MDL	1.0	PQL	ug/L	UJ	L, B
Butylbenzylphthalate	0.15	J	0.050	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.19	J	0.050	MDL	1.0	PQL	ug/L	J	Z
Dimethylphthalate	0.050	U	0.050	MDL	1.0	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.66	J	0.050	MDL	1.0	PQL	ug/L	U	B
Di-n-octylphthalate	0.19	J	0.050	MDL	1.0	PQL	ug/L	UJ	L, B
NAPHTHALENE	0.019	J	0.010	MDL	0.050	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***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	0.75	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z, FD
Butylbenzylphthalate	6.9	J	6.5	MDL	20	PQL	ug/Kg	J	Z, FD
CHRYSENE	0.67	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z, FD
Di-n-octylphthalate	9.7	J	6.5	MDL	20	PQL	ug/Kg	J	Z, FD

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***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(B)FLUORANTHENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.7	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.63	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***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(B)FLUORANTHENE	1.1	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.2	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***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	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.96	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***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(A)PYRENE	0.73	U	0.73	MDL	1.8	PQL	ug/Kg	UJ	FD
Butylbenzylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	FD
CHRYSENE	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	FD
Di-n-octylphthalate	6.5	U	6.5	MDL	20	PQL	ug/Kg	UJ	FD

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory:** LL

EDD Filename: DE082_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** AQ

Sample ID: EB30-SA5B-021511 ***Collected:*** 2/15/2011 10:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3,5-TRINITROBENZENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
1,3-DINITROBENZENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
2,4,6-TRINITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
2,4-DIAMINO-6-NITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	L, S
2,4-DINITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
2,6-Diamino-4-nitrotoluene	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	L, S
2,6-DINITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
2-AMINO-4,6-DINITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
2-NITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
3-NITROTOLUENE	0.40	U	0.40	MDL	1.2	PQL	ug/L	UJ	S
4-AMINO-2,6-DINITROTOLUENE	0.30	U	0.30	MDL	0.60	PQL	ug/L	UJ	S
4-NITROTOLUENE	0.60	U	0.60	MDL	1.2	PQL	ug/L	UJ	S
HMX	0.65	U	0.65	MDL	2.0	PQL	ug/L	UJ	S
NITROBENZENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	L, S
Nitroglycerin	5.2	U	5.2	MDL	15	PQL	ug/L	UJ	S
PETN	6.0	U	6.0	MDL	18	PQL	ug/L	UJ	S
RDX	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	S
Tetryl	0.40	U	0.40	MDL	0.60	PQL	ug/L	UJ	S

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-329-SA5B-SB-4.0-5.0 ***Collected:*** 2/15/2011 2:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
p-Terphenyl	1.6	U	1.6	MDL	3.8	PQL	mg/Kg	UJ	Q

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: EB30-SA5B-021511 ***Collected:*** 2/15/2011 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
TOLUENE	0.9	J	0.7	MDL	5	PQL	ug/L	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **DUP23-SA5B-QC-021511** ***Collected:*** **2/15/2011 2:51:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	3.9	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	3.9	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.06	U	0.06	MDL	3.9	PQL	ug/Kg	UJ	FD
m,p-Xylene	0.17	U	0.17	MDL	3.9	PQL	ug/Kg	UJ	FD
METHYLENE CHLORIDE	0.56	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.08	U	0.08	MDL	3.9	PQL	ug/Kg	UJ	FD

Sample ID: **SL-323-SA5B-SB-11.0-12.0** ***Collected:*** **2/15/2011 8:57:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.98**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.20	U	0.20	MDL	4.4	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.4	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.17	J	0.07	MDL	4.4	PQL	ug/Kg	J	Z
m,p-Xylene	0.54	J	0.19	MDL	4.4	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	3.2	J	0.26	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.09	MDL	4.4	PQL	ug/Kg	U	B, F

Sample ID: **SL-323-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 8:44:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.87**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	4.0	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.0	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.96	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-327-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 11:49:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.9**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	3.9	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	3.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.58	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	3.9	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-329-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 2:35:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.93**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	4.1	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	4.1	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.09	J	0.06	MDL	4.1	PQL	ug/Kg	J	Z, FD
m,p-Xylene	0.30	J	0.17	MDL	4.1	PQL	ug/Kg	J	Z, FD
METHYLENE CHLORIDE	0.67	J	0.24	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.10	J	0.08	MDL	4.1	PQL	ug/Kg	UJ	B, FD, F

Sample ID: **SL-330-SA5B-SB-4.0-5.0** ***Collected:*** **2/15/2011 3:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.81**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.16	U	0.16	MDL	3.6	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.6	PQL	ug/Kg	UJ	L
ETHYLBENZENE	0.1	J	0.06	MDL	3.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.28	J	0.16	MDL	3.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.64	J	0.22	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.07	MDL	3.6	PQL	ug/Kg	U	B, F

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE082

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9040B **Preparation Method: Gen Prep**

Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB30-SA5B-021511 (RES)	Sampling To Analysis	59.00	48.00	HOURS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWB05B261004	2/28/2011 10:04:00 AM	N-NITROSODIMETHYLAMINE	4.03 ng/L	EB30-SA5B-021511

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
EB30-SA5B-021511(RES)	N-NITROSODIMETHYLAMINE	7.79 ng/L	7.79U ng/L

Method: 1625C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLE05B261127	2/28/2011 11:27:00 AM	N-NITROSODIMETHYLAMINE	43.4 ng/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-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-323-SA5B-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	142 ng/Kg	142U ng/Kg
SL-329-SA5B-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	160 ng/Kg	160U ng/Kg
SL-330-SA5B-SB-4.0-5.0(RES)	N-NITROSODIMETHYLAMINE	82.4 ng/Kg	82.4U ng/Kg

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04748BB220320	2/21/2011 3:20:00 AM	LITHIUM	0.0104 mg/L	EB30-SA5B-021511

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
EB30-SA5B-021511(REA)	LITHIUM	0.0204 mg/L	0.0204U mg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04708AB220013	2/21/2011 12:13:00 AM	ALUMINUM CALCIUM PHOSPHORUS STRONTIUM TIN	10.7 mg/Kg 15.8 mg/Kg 1.20 mg/Kg 0.101 mg/Kg 1.41 mg/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0
P04708AB220040	2/22/2011 12:40:00 AM	LITHIUM	0.32 mg/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-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
DUP23-SA5B-QC-021511(REA2)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-323-SA5B-SB-11.0-12.0(REA2)	TIN	3.26 mg/Kg	3.26U mg/Kg
SL-323-SA5B-SB-4.0-5.0(REA2)	TIN	3.09 mg/Kg	3.09U mg/Kg
SL-327-SA5B-SB-4.0-5.0(REA2)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-330-SA5B-SB-4.0-5.0(REA2)	TIN	2.91 mg/Kg	2.91U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04726AB222216A	2/26/2011 10:16:00 PM	COPPER LEAD	0.178 mg/Kg 0.0161 mg/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB74B211252A	2/17/2011 12:52:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.14 ug/Kg 0.39 ug/Kg 0.11 ug/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_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
DUP23-SA5B-QC-021511(RES)	METHYLENE CHLORIDE	0.56 ug/Kg	3.9U ug/Kg
SL-323-SA5B-SB-11.0-12.0(RES)	METHYLENE CHLORIDE	3.2 ug/Kg	4.4U ug/Kg
SL-323-SA5B-SB-11.0-12.0(RES)	TOLUENE	0.10 ug/Kg	4.4U ug/Kg
SL-323-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.96 ug/Kg	4.0U ug/Kg
SL-327-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.58 ug/Kg	3.9U ug/Kg
SL-327-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.9U ug/Kg
SL-329-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	4.1U ug/Kg
SL-329-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.10 ug/Kg	4.1U ug/Kg
SL-330-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.64 ug/Kg	3.6U ug/Kg
SL-330-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.6U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLG05B261510	2/26/2011 3:10:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA04B261643	2/20/2011 4:43:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Di-n-butylphthalate Di-n-octylphthalate	0.18 ug/L 0.13 ug/L 0.16 ug/L 0.18 ug/L	EB30-SA5B-021511

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
EB30-SA5B-021511(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.20 ug/L	1.0U ug/L
EB30-SA5B-021511(RES)	Butylbenzylphthalate	0.15 ug/L	1.0U ug/L
EB30-SA5B-021511(RES)	Di-n-butylphthalate	0.66 ug/L	1.0U ug/L
EB30-SA5B-021511(RES)	Di-n-octylphthalate	0.19 ug/L	1.0U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLI05B261944	2/23/2011 7:44:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	7.0 ug/Kg 6.2 ug/Kg	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-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-323-SA5B-SB-11.0-12.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	10 ug/Kg	20U ug/Kg

Equipment Rinsate Blank Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

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

Equipment Blank Sample ID	Collected Date	Analyte	Result	Associated Samples
EB30-SA5B-021511(RES)	2/15/2011 10:00:00 AM	TOLUENE	0.9 ug/L	DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-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-323-SA5B-SB-11.0-12.0(RES)	TOLUENE	0.10 ug/Kg	4.4U ug/Kg
SL-327-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.9U ug/Kg
SL-329-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.10 ug/Kg	4.1U ug/Kg
SL-330-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.09 ug/Kg	3.6U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
EB30-SA5B-021511MS **EB30-SA5B-021511MSD** (EB30-SA5B-021511)	DIETHYLENE GLYCOL	82	-	83.00-130.00	36 (20.00)	DIETHYLENE 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-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	ARSENIC	166	178	75.00-125.00	-	ARSENIC	J (all detects) Zn No Qual, >4x
	BERYLLIUM	137	146	75.00-125.00	-	BERYLLIUM	
	CADMIUM	149	151	75.00-125.00	-	CADMIUM	
	CHROMIUM	174	178	75.00-125.00	-	CHROMIUM	
	COBALT	153	149	75.00-125.00	-	COBALT	
	COPPER	155	152	75.00-125.00	-	COPPER	
	LEAD	181	181	75.00-125.00	-	LEAD	
	NICKEL	153	160	75.00-125.00	-	NICKEL	
	SILVER	146	144	75.00-125.00	-	SILVER	
	THALLIUM	144	169	75.00-125.00	-	THALLIUM	
	VANADIUM	202	186	75.00-125.00	-	VANADIUM	
	ZINC	214	291	75.00-125.00	-	ZINC	
SL-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	ANTIMONY	43	51	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	SELENIUM	154	132	75.00-125.00	-	SELENIUM	J(all detects)
SL-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	MOLYBDENUM	144	152	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	BARIUM	204	226	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_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-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	ALUMINUM MAGNESIUM MANGANESE POTASSIUM TITANIUM	1804 150 138 133 252	1878 136 - - 257	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM MAGNESIUM MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Mg, Ti No Qual, >4x
SL-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	IRON	153	3	75.00-125.00	-	IRON	No Qual, >4x

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-329-SA5B-SB-4.0-5.0MSD (SL-329-SA5B-SB-4.0-5.0)	3,3'-DICHLOROBENZIDINE ISOPHORONE	- -	- 103	16.00-119.00 73.00-102.00	44 (30.00) -	3,3'-DICHLOROBENZIDINE ISOPHORONE	J(all detects)
SL-329-SA5B-SB-4.0-5.0MS **SL-329-SA5B-SB-4.0-5.0MSD** (SL-329-SA5B-SB-4.0-5.0)	BENZIDINE	33	19	35.00-141.00	56 (30.00)	BENZIDINE	J(all detects) UJ(all non-detects)

Method: 314.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-329-SA5B-SB-4.0-5.0MS (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	PERCHLORATE	74	-	80.00-120.00	-	PERCHLORATE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_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-329-SA5B-SB-4.0-5.0MS (DUP23-SA5B-QC-021511 SL-323-SA5B-SB-11.0-12.0 SL-323-SA5B-SB-4.0-5.0 SL-327-SA5B-SB-4.0-5.0 SL-329-SA5B-SB-4.0-5.0 SL-330-SA5B-SB-4.0-5.0)	FLUORIDE	66	-	80.00-120.00	-	FLUORIDE	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-329-SA5B-SB-4.0-5.0MS	EFH (C15-C20)	290	449	49.00-123.00	43 (20.00)	EFH (C15-C20)	J(all detects)
SL-329-SA5B-SB-4.0-5.0MSD	EFH (C21-C30)	1321	2098	49.00-123.00	43 (20.00)	EFH (C21-C30)	
(SL-329-SA5B-SB-4.0-5.0)	EFH (C30-C40)	1212	1816	49.00-123.00	36 (20.00)	EFH (C30-C40)	

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-329-SA5B-SB-4.0-5.0MSD (SL-329-SA5B-SB-4.0-5.0)	p-Terphenyl	-	73	75.00-125.00	-	p-Terphenyl	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-329-SA5B-SB-4.0-5.0DUP	TIN	133	20.00	
(DUP23-SA5B-QC-021511	Zirconium	42	20.00	
SL-323-SA5B-SB-11.0-12.0				No Qual
SL-323-SA5B-SB-4.0-5.0				OK by difference
SL-327-SA5B-SB-4.0-5.0				
SL-329-SA5B-SB-4.0-5.0				
SL-330-SA5B-SB-4.0-5.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-329-SA5B-SB-4.0-5.0DUP	ANTIMONY	58	20.00	
(DUP23-SA5B-QC-021511	ARSENIC	25	20.00	J(all detects)
SL-323-SA5B-SB-11.0-12.0	CADMIUM	22	20.00	UJ(all non-detects)
SL-323-SA5B-SB-4.0-5.0	SELENIUM	39	20.00	
SL-327-SA5B-SB-4.0-5.0	SILVER	29	20.00	Sb, Cd, Se, Ag
SL-329-SA5B-SB-4.0-5.0				No Qual
SL-330-SA5B-SB-4.0-5.0)				OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9WALCSQ261720 P9WALCSY261758 (EB30 -SA5B -021511)	BENZO(A)ANTHRACENE BENZO(B)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALAT Di-n-octylphthalate	118 124 138 133	115 - - -	72.00-114.00 69.00-123.00 70.00-130.00 70.00-130.00	- - - -	BENZO(A)ANTHRACENE BENZO(B)FLUORANTHENE BIS(2-ETHYLHEXYL)PHTHALA Di-n-octylphthalate	J (all detects)
P9WALCSY261758 (EB30 -SA5B -021511)	Dimethylphthalate	-	66	70.00-130.00	-	Dimethylphthalate	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P9WBLCSY261354 (EB30 -SA5B -021511)	4-CHLOROANILINE	-	-	42.00-124.00	31 (30.00)	4-CHLOROANILINE	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10487AQ240013A P10487AY242355A (EB30 -SA5B -021511)	Aroclor 5442	60	62	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10506AQ241016A P10506AY240933A P10506AY241058A (EB30 -SA5B -021511)	2,4-DIAMINO-6-NITROTOLUENE 2,6-Diamino-4-nitrotoluene NITROBENZENE	15 15 -	20 20 71	50.00-122.00 50.00-122.00 75.00-121.00	- - -	2,4-DIAMINO-6-NITROTOLUEN 2,6-Diamino-4-nitrotoluene NITROBENZENE	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10528AQ240851A (DUP23 -SA5B -QC -021511 SL -323-SA5B -SB-11.0-12.0 SL -323-SA5B -SB-4.0-5.0 SL -327-SA5B -SB-4.0-5.0 SL -329-SA5B -SB-4.0-5.0 SL -330-SA5B -SB-4.0-5.0)	AROCLOR 1016 AROCLOR 1260	207 235	- -	72.00-120.00 65.00-137.00	- -	AROCLOR 1016, 1221, 1232 AROCLOR 1242, 1248, 1254, 1260	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_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
P10528AQ240929A **P10528AY240910A** (DUP23 -SA5B -QC-021511 SL -323-SA5B -SB-11.0-12.0 SL -323-SA5B -SB-4.0-5.0 SL -327-SA5B -SB-4.0-5.0 SL -329-SA5B -SB-4.0-5.0 SL -330-SA5B -SB-4.0-5.0)	Aroclor 5442	57	70	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10537AQ240255A (DUP23 -SA5B -QC-021511 SL -323-SA5B -SB-11.0-12.0 SL -323-SA5B -SB-4.0-5.0 SL -327-SA5B -SB-4.0-5.0 SL -329-SA5B -SB-4.0-5.0 SL -330-SA5B -SB-4.0-5.0)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J(all detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB74Q211326A (DUP23 -SA5B -QC-021511 SL -323-SA5B -SB-11.0-12.0 SL -323-SA5B -SB-4.0-5.0 SL -327-SA5B -SB-4.0-5.0 SL -329-SA5B -SB-4.0-5.0 SL -330-SA5B -SB-4.0-5.0)	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	67 79	- -	68.00-120.00 80.00-120.00	- -	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: AQ

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB30-SA5B-021511	2-NITRO-M-XYLENE	74	75.00-120.00	All Target Analytes	J (all detects) UJ (all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%) SL-329-SA5B-SB-4.0-5.0	Concentration (%) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
MOISTURE	8.3	8.3	0		No Qualifiers Applied

Method: 1625c
Matrix: SO

Analyte	Concentration (ng/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (ng/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
N-NITROSODIMETHYLAMINE	160	360 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
FLUORIDE	2.6	3.3	24	50.00	No Qualifiers Applied
Nitrate-NO3	8.3	6.5	24	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
ALUMINUM	12100	13600	12	50.00	
CALCIUM	1990	2200	10	50.00	
IRON	17300	17900	3	50.00	
LITHIUM	21.2	22.0	4	50.00	
MAGNESIUM	2960	3090	4	50.00	
PHOSPHORUS	354	363	3	50.00	No Qualifiers Applied
POTASSIUM	3050	3110	2	50.00	
SODIUM	153	134	13	50.00	
STRONTIUM	14.5	16.9	15	50.00	
TITANIUM	930	994	7	50.00	
Zirconium	1.44	1.51	5	50.00	
MANGANESE	152	311	69	50.00	J(all detects)
TIN	14.3	2.65	137	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
ARSENIC	4.16	5.97	36	50.00	No Qualifiers Applied
BARIUM	119	135	13	50.00	
BERYLLIUM	0.676	0.614	10	50.00	
CHROMIUM	17.4	16.5	5	50.00	
COBALT	6.79	5.60	19	50.00	
COPPER	9.11	8.71	4	50.00	
MOLYBDENUM	0.451	0.467	3	50.00	
NICKEL	12.8	11.5	11	50.00	
SELENIUM	0.120	0.148	21	50.00	
THALLIUM	0.367	0.317	15	50.00	
VANADIUM	34.9	35.2	1	50.00	
ANTIMONY	0.106	0.834	155	50.00	J(all detects)
CADMIUM	0.150	2.28	175	50.00	
LEAD	7.94	35.4	127	50.00	
SILVER	0.0345	0.0605	55	50.00	
ZINC	76.3	298	118	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	0.42	0.42	0	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
MERCURY	0.108 U	0.0049	200	50.00	J(all detects) UJ(all non-detects)

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (mg/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
EFH (C15-C20)	1.3 U	4.6	200	50.00	J(all detects) UJ(all non-detects)
EFH (C21-C30)	2.4	53	183	50.00	
EFH (C30-C40)	4.7	100	182	50.00	

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg) SL-329-SA5B-SB-4.0-5.0	Concentration (ug/Kg) DUP23-SA5B-QC-021511	Sample RPD	eQAPP RPD	Flag
METHYLENE CHLORIDE	0.67	0.56	18	50.00	No Qualifiers Applied
ETHYLBENZENE	0.09	3.9 U	200	50.00	J(all detects) UJ(all non-detects)
m,p-Xylene	0.30	3.9 U	200	50.00	
TOLUENE	0.10	3.9 U	200	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Field Duplicate RPD Report

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-329-SA5B-SB-4.0-5.0	DUP23-SA5B-QC-021511			
BENZO(A)PYRENE	1.8 U	0.75	200	50.00	
Butylbenzylphthalate	20 U	6.9	200	50.00	J(all detects)
CHRYSENE	1.8 U	0.67	200	50.00	UJ(all non-detects)
Di-n-octylphthalate	20 U	9.7	200	50.00	

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-329-SA5B-SB-4.0-5.0	DUP23-SA5B-QC-021511			
PH	7.00	7.07	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-329-SA5B-SB-4.0-5.0	DUP23-SA5B-QC-021511			
Oxidation Reduction Potential	535	429	22		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB30-SA5B-021511	TOLUENE	J	0.9	5	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB30-SA5B-021511	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.20	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.15	1.0	PQL	ug/L	
	Diethylphthalate	J	0.19	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.66	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.19	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.019	0.050	PQL	ug/L	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	TIN	J	2.65	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.51	5.40	PQL	mg/Kg	
SL-323-SA5B-SB-11.0-12.0	TIN	J	3.26	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.48	5.39	PQL	mg/Kg	
SL-323-SA5B-SB-4.0-5.0	TIN	J	3.09	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.65	5.71	PQL	mg/Kg	
SL-327-SA5B-SB-4.0-5.0	TIN	J	2.76	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.06	5.32	PQL	mg/Kg	
SL-329-SA5B-SB-4.0-5.0	Zirconium	J	1.44	5.45	PQL	mg/Kg	J (all detects)
SL-330-SA5B-SB-4.0-5.0	TIN	J	2.91	11.1	PQL	mg/Kg	J (all detects)

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	SELENIUM	J	0.148	0.419	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0605	0.105	PQL	mg/Kg	
SL-323-SA5B-SB-11.0-12.0	SELENIUM	J	0.181	0.431	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SB-4.0-5.0	SELENIUM	J	0.140	0.452	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0446	0.113	PQL	mg/Kg	
SL-327-SA5B-SB-4.0-5.0	SELENIUM	J	0.136	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0565	0.105	PQL	mg/Kg	
SL-329-SA5B-SB-4.0-5.0	ANTIMONY	J	0.106	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.432	PQL	mg/Kg	
	SILVER	J	0.0345	0.108	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-330-SA5B-SB-4.0-5.0	ANTIMONY	J	0.142	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.258	0.445	PQL	mg/Kg	
	SILVER	J	0.0360	0.111	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SB-11.0-12.0	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.51	1.2	PQL	mg/Kg	J (all detects)
SL-327-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-329-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-330-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	MERCURY	J	0.0049	0.108	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SB-11.0-12.0	MERCURY	J	0.0203	0.110	PQL	mg/Kg	J (all detects)
SL-323-SA5B-SB-4.0-5.0	MERCURY	J	0.0116	0.114	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	EFH (C15-C20)	J	4.6	6.5	PQL	mg/Kg	J (all detects)
SL-330-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	0.64	1.3	PQL	mg/Kg	J (all detects)
	EFH (C30-C40)	J	0.59	1.3	PQL	mg/Kg	

Method: 8082
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-327-SA5B-SB-4.0-5.0	AROCLOR 1260	J	0.54	1.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE082 **Laboratory: LL**

EDD Filename: DE082_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	METHYLENE CHLORIDE	J	0.56	3.9	PQL	ug/Kg	J (all detects)
SL-323-SA5B-SB-11.0-12.0	ETHYLBENZENE	J	0.17	4.4	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.54	4.4	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	3.2	4.4	PQL	ug/Kg	
	TOLUENE	J	0.10	4.4	PQL	ug/Kg	
SL-323-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.96	4.0	PQL	ug/Kg	J (all detects)
SL-327-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.58	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	3.9	PQL	ug/Kg	
SL-329-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.09	4.1	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.30	4.1	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.67	4.1	PQL	ug/Kg	
	TOLUENE	J	0.10	4.1	PQL	ug/Kg	
SL-330-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.1	3.6	PQL	ug/Kg	J (all detects)
	m,p-Xylene	J	0.28	3.6	PQL	ug/Kg	
	METHYLENE CHLORIDE	J	0.64	3.6	PQL	ug/Kg	
	TOLUENE	J	0.09	3.6	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP23-SA5B-QC-021511	BENZO(A)PYRENE	J	0.75	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	6.9	20	PQL	ug/Kg	
	CHRYSENE	J	0.67	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	9.7	20	PQL	ug/Kg	
SL-323-SA5B-SB-11.0-12.0	BENZO(B)FLUORANTHENE	J	0.78	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.7	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	20	PQL	ug/Kg	
	CHRYSENE	J	0.63	1.8	PQL	ug/Kg	
SL-323-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.2	1.9	PQL	ug/Kg	
SL-327-SA5B-SB-4.0-5.0	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	0.96	1.8	PQL	ug/Kg	

LDC #: 25764F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE082 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CC
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	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits → No Quals
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Ti, Zn 74X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Cd, Se, Ag, Sn, Zr < 5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Co: 15%, Li: 145% (J/UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	SW	EB-2

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	DUP-SA5B-QC-021511 D	11		21		31	
2	EB30-SA5B-021511	12		22		32	
3	SL-323-SA5B-SB-11.0-12.0	13		23		33	
4	SL-323-SA5B-SB-4.0-5.0	14		24		34	
5	SL-327-SA5B-SB-4.0-5.0	15		25		35	
6	SL-329-SA5B-SB-4.0-5.0 D	16		26		36	
7	SL-330-SA5B-SB-4.0-5.0	17		27		37	
8	SL-329-SA5B-SB-4.0-5.0MS	18		28		38	
9	SL-329-SA5B-SB-4.0-5.0MSD	19		29		39	
10	SL-329-SA5B-SB-4.0-5.0DUP	20		30		40	

Notes:

LDC #: 25764F4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Page: 1 of
Reviewer:
2nd Reviewer:

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?

Blank units: ug/L **Associated sample units:** mg/Kg

Sampling date: 2/15/11 Soil factor applied 100x

Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	2	Action Level	No Qualifiers									
Li	20.4	10.2										

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".

SAMPLE DELIVERY GROUP

DE083

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
16-Feb-2011	TB-021611	6208353	TB	5030B	8015M	III
16-Feb-2011	TB-021611	6208353	TB	5030B	8260B	III
16-Feb-2011	TB-021611	6208353	TB	5030B	8260B SIM	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3050B	6010B	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3050B	6020	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3060A	7199	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8081A	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8082	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8151A	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8270C	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	3550B	8270C SIM	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	Gen Prep	9045M	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	METHOD	300.0	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	METHOD	314.0	III
16-Feb-2011	SL-032-SA5A-SS-0.0-0.5	6208348	N	METHOD	7471A	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3050B	6010B	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3050B	6020	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3060A	7199	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8081A	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8082	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8151A	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8270C	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	3550B	8270C SIM	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	Gen Prep	9045M	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	METHOD	300.0	III
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	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
16-Feb-2011	SL-041-SA5A-SS-0.0-0.5	6208349	N	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3060A	7199	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8081A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8082	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8151A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8270C	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	3550B	8270C SIM	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	Gen Prep	9045M	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	METHOD	300.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	METHOD	314.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5	6208342	N	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D220252	DUP	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D220603	DUP	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D220912	DUP	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154A	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154B	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154C	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221154D	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D221314A	DUP	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D271434A	DUP	METHOD	314.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5DUP	P208342D271623A	DUP	3060A	7199	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M220300	MSD	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M220610	MSD	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M220914	MSD	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
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200A	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200B	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200C	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221200D	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M221319A	MSD	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M241753A	MSD	3550B	8151A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MSD	P208342M260230	MSD	3550B	8270C SIM	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R220256	MS	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R220607	MS	3050B	6010B	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R220913	MS	METHOD	7471A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157A	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157B	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157C	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221157D	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R221316A	MS	3050B	6020	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R241726A	MS	3550B	8151A	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R260156	MS	3550B	8270C SIM	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R271458A	MS	METHOD	314.0	III
16-Feb-2011	SL-024-SA5A-SS-0.0-0.5MS	P208342R271540A	MS	3060A	7199	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3050B	6010B	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3050B	6020	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3060A	7199	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8081A	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8082	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8151A	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8270C	III

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FD = Field Duplicate
TB = Trip Blank
FB = Field Blank
MS = Matrix Spike
MSD = Matrix Spike Duplicate

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	3550B	8270C SIM	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	Gen Prep	9045M	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	300.0	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	314.0	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	6850	III
16-Feb-2011	SL-026-SA5A-SS-0.0-0.5	6208344	N	METHOD	7471A	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3050B	6010B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3050B	6020	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3060A	7199	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3546	1625C	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8015B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8015M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8082	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8270C	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	3550B	8270C SIM	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	5035	8015M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	5035	8260B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	5035	8260B SIM	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	8330	8330A	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	Gen Prep	314.0	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	Gen Prep	9045M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	300.0	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	7471A	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	8015B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	8015M	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	8315A	III

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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
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0	6208352	N	METHOD	9012B	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0DUP	P208352D272029B	DUP	METHOD	300.0	III
16-Feb-2011	SL-335-SA5B-SB-2.0-3.0MS	P208352R272044B	MS	METHOD	300.0	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3050B	6010B	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3050B	6020	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3060A	7199	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8081A	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8082	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8151A	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8270C	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	3550B	8270C SIM	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	Gen Prep	9045M	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	METHOD	300.0	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	METHOD	314.0	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5	6208347	N	METHOD	7471A	III
16-Feb-2011	SL-031-SA5A-SS-0.0-0.5DUP	P208347D291130A	DUP	Gen Prep	9045M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3050B	6010B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3050B	6020	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3060A	7199	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3546	1625C	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8015B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8015M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8082	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8270C	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	3550B	8270C SIM	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	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
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	5035	8260B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	5035	8260B SIM	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	8330	8330A	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	Gen Prep	9045M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	300.0	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	314.0	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	7471A	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	8015B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	8015M	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	8315A	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0	6208351	N	METHOD	9012B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0MSD	P208351M322033A	MSD	METHOD	8015B	III
16-Feb-2011	SL-333-SA5B-SB-4.0-5.0MS	P208351R322018A	MS	METHOD	8015B	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3050B	6010B	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3050B	6020	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3060A	7199	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8081A	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8082	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8151A	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8270C	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	3550B	8270C SIM	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	Gen Prep	9045M	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	METHOD	300.0	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	METHOD	314.0	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5	6208345	N	METHOD	7471A	III
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5MSD	P208345M242038A	MSD	3550B	8151A	III

III = EPA Level 3 Data Review *N = Normal Sample* *TB = Trip Blank* *MS = Matrix Spike*
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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-028-SA5A-SS-0.0-0.5MS	P208345R242011A	MS	3550B	8151A	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3050B	6010B	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3050B	6020	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3060A	7199	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8081A	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8082	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8151A	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8270C	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	3550B	8270C SIM	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	Gen Prep	9045M	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	METHOD	300.0	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	METHOD	314.0	III
16-Feb-2011	SL-029-SA5A-SS-0.0-0.5	6208346	N	METHOD	7471A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3050B	6010B	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3050B	6020	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3060A	7199	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8081A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8082	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8151A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8270C	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	3550B	8270C SIM	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	Gen Prep	9045M	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	METHOD	300.0	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	METHOD	314.0	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5	6208343	N	METHOD	7471A	III
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5DUP	P208343D271656A	DUP	METHOD	300.0	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-025-SA5A-SS-0.0-0.5MS	P208343R271712A	MS	METHOD	300.0	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3050B	6010B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3050B	6020	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3060A	7199	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3546	1625C	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8015B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8082	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8270C	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	3550B	8270C SIM	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	5035	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	5035	8260B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	5035	8260B SIM	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	8330	8330A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	Gen Prep	9045M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	300.0	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	314.0	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	7471A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	8015B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	8315A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0	6208350	N	METHOD	9012B	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MSD	P208350M241750A	MSD	METHOD	8315A	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MSD	P208350M320551A	MSD	3550B	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MSD	P208350M321735A	MSD	METHOD	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MS	P208350R241740A	MS	METHOD	8315A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MS	P208350R320526A	MS	3550B	8015M	III
16-Feb-2011	SL-332-SA5B-SB-4.0-5.0MS	P208350R321718A	MS	METHOD	8015M	III

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IV = EPA Level 4 Data Validation
N = Normal Sample
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MSD = Matrix Spike Duplicate

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	3.9		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	1.8		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	1.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	1.7		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	1.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
FLUORIDE	1.2		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

porting Batch ID: DE083 Laboratory: LL

lename: PrepDE083_v1 eQAPP Name: CDM_SSFL_110509

Category: GENCHEM

300.0 Matrix: SO

D: SL-332-SA5B-SB-4.0-5.0 Collected: 2/16/2011 4:16:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
E	2.9		0.88	MDL	1.1	PQL	mg/Kg	J	Q

D: SL-333-SA5B-SB-4.0-5.0 Collected: 2/16/2011 12:30:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
E	3.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Category: METALS

6010B Matrix: SO

D: SL-024-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:30:00 Analysis Type: REA Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	20.7		0.23	MDL	2.1	PQL	mg/Kg	J	A

D: SL-024-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:30:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	1.90	J	0.940	MDL	5.28	PQL	mg/Kg	J	Z
UM	3260		19.0	MDL	52.8	PQL	mg/Kg	J	Q
	67.6	J	39.4	MDL	106	PQL	mg/Kg	J	Z
	2.59	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
	2.20	J	0.887	MDL	5.28	PQL	mg/Kg	J	Z

D: SL-025-SA5A-SS-0.0-0.5 Collected: 2/16/2011 1:28:00 Analysis Type: REA Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	20.3		0.25	MDL	2.3	PQL	mg/Kg	J	A

D: SL-025-SA5A-SS-0.0-0.5 Collected: 2/16/2011 1:28:00 Analysis Type: RES Dilution: 1

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	3.37	J	1.02	MDL	5.71	PQL	mg/Kg	J	Z
UM	3490		20.6	MDL	57.1	PQL	mg/Kg	J	Q
	81.4	J	42.6	MDL	114	PQL	mg/Kg	J	Z

a non-reportable result

ame and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.80	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.960	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.5		0.24	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
BORON	1.55	J	0.970	MDL	5.45	PQL	mg/Kg	J	Z
POTASSIUM	3100		19.6	MDL	54.5	PQL	mg/Kg	J	Q
SODIUM	90.1	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.88	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.78	J	0.915	MDL	5.45	PQL	mg/Kg	U	B

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	17.1		0.23	MDL	2.1	PQL	mg/Kg	J	A

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
BORON	2.54	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
POTASSIUM	3520		19.2	MDL	53.3	PQL	mg/Kg	J	Q
SODIUM	81.4	J	39.8	MDL	107	PQL	mg/Kg	J	Z
TIN	2.61	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.24	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	20.7		0.25	MDL	2.2	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-029-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 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
BORON	2.67	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
POTASSIUM	3370		20.2	MDL	56.1	PQL	mg/Kg	J	Q
SODIUM	99.5	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.55	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.46	J	0.942	MDL	5.61	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 11:10:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	16.3		0.25	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: SL-031-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 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
BORON	2.06	J	0.996	MDL	5.59	PQL	mg/Kg	J	Z
POTASSIUM	3130		20.1	MDL	55.9	PQL	mg/Kg	J	Q
SODIUM	78.9	J	41.7	MDL	112	PQL	mg/Kg	J	Z
TIN	2.58	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.940	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-032-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 9:20:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	27.1		0.24	MDL	2.1	PQL	mg/Kg	J	A

Sample ID: SL-032-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 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
BORON	1.54	J	0.956	MDL	5.37	PQL	mg/Kg	J	Z
POTASSIUM	4870		19.3	MDL	53.7	PQL	mg/Kg	J	Q
SODIUM	71.0	J	40.1	MDL	107	PQL	mg/Kg	J	Z
TIN	3.01	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.902	MDL	5.37	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-041-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 9:30:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	25.3		0.24	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: SL-041-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 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
BORON	1.41	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
POTASSIUM	4360		19.7	MDL	54.8	PQL	mg/Kg	J	Q
SODIUM	66.6	J	40.9	MDL	110	PQL	mg/Kg	J	Z
TIN	2.50	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.921	MDL	5.48	PQL	mg/Kg	U	B

Sample ID: SL-332-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 4:16:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	15.6		0.23	MDL	2.1	PQL	mg/Kg	J	A

Sample ID: SL-332-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 4:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2500		19.2	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.49	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	0.914	J	0.897	MDL	5.34	PQL	mg/Kg	U	B

Sample ID: SL-333-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 12:30:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	13.2		0.25	MDL	2.3	PQL	mg/Kg	J	A

Sample ID: SL-333-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 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
BORON	1.04	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
POTASSIUM	2050		20.4	MDL	56.6	PQL	mg/Kg	J	Q
TIN	2.74	J	1.13	MDL	11.3	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	15.7		0.24	MDL	2.2	PQL	mg/Kg	J	A

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	2990		19.5	MDL	54.2	PQL	mg/Kg	J	Q
TIN	2.87	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	0.965	J	0.910	MDL	5.42	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.298		0.0427	MDL	0.107	PQL	mg/Kg	J	Q, E

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.253	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.08		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.115	MDL	0.427	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.306		0.0640	MDL	0.213	PQL	mg/Kg	J	Q, E
ARSENIC	6.24		0.0853	MDL	0.427	PQL	mg/Kg	J	Q, E
CHROMIUM	26.5		0.128	MDL	0.427	PQL	mg/Kg	J	Q, A
COBALT	8.39		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, E, A
COPPER	15.3		0.0704	MDL	0.427	PQL	mg/Kg	J	Q, E, A
LEAD	22.0		0.0111	MDL	0.213	PQL	mg/Kg	J	A
NICKEL	17.7		0.107	MDL	0.427	PQL	mg/Kg	J	Q, E, A
SILVER	0.0856	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.398		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	51.9		0.0235	MDL	0.107	PQL	mg/Kg	J	E
ZINC	89.9		0.597	MDL	3.20	PQL	mg/Kg	J	A

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.270	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.695		0.0566	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	173		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.226	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Q, E
ARSENIC	5.77		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
CADMIUM	4.60		0.0453	MDL	0.113	PQL	mg/Kg	J	Q, E
CHROMIUM	32.4		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	9.76		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

porting Batch ID: DE083 Laboratory: LL

lename: PrepDE083_v1 eQAPP Name: CDM_SSFL_110509

Category: METALS

: 6020 Matrix: SO

D: SL-025-SA5A-SS-0.0-0.5 Collected: 2/16/2011 1:28:00 Analysis Type: RES Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	18.3		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E, A
	36.1		0.0118	MDL	0.226	PQL	mg/Kg	J	A
	26.5		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
	0.161		0.0136	MDL	0.113	PQL	mg/Kg	J	Q
M	0.409		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
IM	54.5		0.0249	MDL	0.113	PQL	mg/Kg	J	E
	138		0.634	MDL	3.39	PQL	mg/Kg	J	A

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M	0.222		0.0432	MDL	0.108	PQL	mg/Kg	J	Q, E

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA2 Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
M	0.133	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z, Q

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA3 Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENUM	0.738		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: REA4 Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
	138		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

D: SL-026-SA5A-SS-0.0-0.5 Collected: 2/16/2011 10:45:00 Analysis Type: RES Dilution: 2

	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NY	0.283		0.0648	MDL	0.216	PQL	mg/Kg	J	Q, E
:	5.40		0.0863	MDL	0.432	PQL	mg/Kg	J	Q, E
UM	27.4		0.130	MDL	0.432	PQL	mg/Kg	J	Q, A
	8.67		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E, A

; a non-reportable result

lame and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	13.7		0.0712	MDL	0.432	PQL	mg/Kg	J	Q, E, A
LEAD	26.2		0.0112	MDL	0.216	PQL	mg/Kg	J	A
NICKEL	16.3		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E, A
SILVER	0.0551	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.376		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	56.9		0.0237	MDL	0.108	PQL	mg/Kg	J	E
ZINC	92.2		0.604	MDL	3.24	PQL	mg/Kg	J	A

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.196	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.949		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.209	J	0.0665	MDL	0.222	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.46		0.0887	MDL	0.443	PQL	mg/Kg	J	Q, E
CADMIUM	0.413		0.0443	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	28.0		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	9.41		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	15.1		0.0732	MDL	0.443	PQL	mg/Kg	J	Q, E, A
LEAD	9.21		0.0115	MDL	0.222	PQL	mg/Kg	J	A
NICKEL	17.6		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.0480	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.421		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	51.3		0.0244	MDL	0.111	PQL	mg/Kg	J	E
ZINC	71.8		0.621	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.165		0.0440	MDL	0.110	PQL	mg/Kg	UJ	Q, E, B

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.180	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.00		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.142	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.10		0.0880	MDL	0.440	PQL	mg/Kg	J	Q, E
CHROMIUM	25.6		0.132	MDL	0.440	PQL	mg/Kg	J	Q, A
COBALT	7.58		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	13.0		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E, A
LEAD	12.8		0.0114	MDL	0.220	PQL	mg/Kg	J	A
NICKEL	15.0		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E, A
SILVER	0.0535	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.333		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	46.0		0.0242	MDL	0.110	PQL	mg/Kg	J	E
ZINC	70.3		0.616	MDL	3.30	PQL	mg/Kg	J	A

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.450		0.0435	MDL	0.435	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.34		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.117	MDL	0.435	PQL	mg/Kg	J	E, A

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.197	J	0.0652	MDL	0.217	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.08		0.0869	MDL	0.435	PQL	mg/Kg	J	Q, E
CADMIUM	0.324		0.0435	MDL	0.109	PQL	mg/Kg	J	Q, E
CHROMIUM	27.0		0.130	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	9.56		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E, A
COPPER	14.8		0.0717	MDL	0.435	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0113	MDL	0.217	PQL	mg/Kg	J	A
NICKEL	17.6		0.109	MDL	0.435	PQL	mg/Kg	J	Q, E, A
SILVER	0.0658	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.404		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	49.4		0.0239	MDL	0.109	PQL	mg/Kg	J	E
ZINC	148		0.608	MDL	3.26	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.259		0.0332	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.169	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.545		0.0553	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.160	J	0.0664	MDL	0.221	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.19		0.0885	MDL	0.442	PQL	mg/Kg	J	Q, E
CADMIUM	0.223		0.0442	MDL	0.111	PQL	mg/Kg	J	Q, E
CHROMIUM	22.1		0.133	MDL	0.442	PQL	mg/Kg	J	Q, A
COBALT	6.97		0.0221	MDL	0.111	PQL	mg/Kg	J	Q, E, A
COPPER	11.6		0.0730	MDL	0.442	PQL	mg/Kg	J	Q, E, A
LEAD	11.6		0.0115	MDL	0.221	PQL	mg/Kg	J	A
NICKEL	13.9		0.111	MDL	0.442	PQL	mg/Kg	J	Q, E, A
SILVER	0.0620	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
VANADIUM	41.0		0.0243	MDL	0.111	PQL	mg/Kg	J	E
ZINC	72.8		0.619	MDL	3.32	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.225		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.740		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.118	MDL	0.439	PQL	mg/Kg	J	E, A

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0932	J	0.0658	MDL	0.219	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.03		0.0877	MDL	0.439	PQL	mg/Kg	J	Q, E
CADMIUM	0.297		0.0439	MDL	0.110	PQL	mg/Kg	J	Q, E
CHROMIUM	26.7		0.132	MDL	0.439	PQL	mg/Kg	J	Q, A
COBALT	7.87		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E, A
COPPER	13.9		0.0724	MDL	0.439	PQL	mg/Kg	J	Q, E, A
LEAD	11.1		0.0114	MDL	0.219	PQL	mg/Kg	J	A
NICKEL	16.1		0.110	MDL	0.439	PQL	mg/Kg	J	Q, E, A
SILVER	0.0431	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
VANADIUM	48.3		0.0241	MDL	0.110	PQL	mg/Kg	J	E
ZINC	86.1		0.614	MDL	3.29	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.231	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.582		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	82.9		0.118	MDL	0.436	PQL	mg/Kg	J	E, A

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0654	MDL	0.218	PQL	mg/Kg	J	Z, Q, E
ARSENIC	5.06		0.0871	MDL	0.436	PQL	mg/Kg	J	Q, E
CADMIUM	0.0881	J	0.0436	MDL	0.109	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	16.8		0.131	MDL	0.436	PQL	mg/Kg	J	Q, A
COBALT	4.43		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E, A
COPPER	8.56		0.0719	MDL	0.436	PQL	mg/Kg	J	Q, E, A
LEAD	6.63		0.0113	MDL	0.218	PQL	mg/Kg	J	A
NICKEL	10.2		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E, A
SILVER	0.0273	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0327	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	45.0		0.0240	MDL	0.109	PQL	mg/Kg	J	E
ZINC	75.1		0.610	MDL	3.27	PQL	mg/Kg	J	A

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0977	J	0.0453	MDL	0.453	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.217		0.0566	MDL	0.113	PQL	mg/Kg	UJ	Q, B

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	51.1		0.122	MDL	0.453	PQL	mg/Kg	J	E, A

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 12:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0824	J	0.0679	MDL	0.226	PQL	mg/Kg	J	Z, Q, E
ARSENIC	3.96		0.0905	MDL	0.453	PQL	mg/Kg	J	Q, E
CADMIUM	0.0453	U	0.0453	MDL	0.113	PQL	mg/Kg	UJ	E
CHROMIUM	11.9		0.136	MDL	0.453	PQL	mg/Kg	J	Q, A
COBALT	2.26		0.0226	MDL	0.113	PQL	mg/Kg	J	Q, E, A
COPPER	4.12		0.0747	MDL	0.453	PQL	mg/Kg	J	Q, E, A
LEAD	5.25		0.0118	MDL	0.226	PQL	mg/Kg	J	A
NICKEL	4.76		0.113	MDL	0.453	PQL	mg/Kg	J	Q, E, A
SILVER	0.0273	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.300		0.0339	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	24.8		0.0249	MDL	0.113	PQL	mg/Kg	J	E
ZINC	58.1		0.634	MDL	3.39	PQL	mg/Kg	J	A

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z, Q

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	63.5		0.116	MDL	0.429	PQL	mg/Kg	J	E, A

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0644	MDL	0.215	PQL	mg/Kg	J	Z, Q, E
ARSENIC	6.14		0.0858	MDL	0.429	PQL	mg/Kg	J	Q, E
CADMIUM	0.0459	J	0.0429	MDL	0.107	PQL	mg/Kg	J	Z, Q, E
CHROMIUM	15.9		0.129	MDL	0.429	PQL	mg/Kg	J	Q, A
COBALT	3.95		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, E, A
COPPER	4.80		0.0708	MDL	0.429	PQL	mg/Kg	J	Q, E, A
LEAD	6.93		0.0112	MDL	0.215	PQL	mg/Kg	J	A
NICKEL	6.20		0.107	MDL	0.429	PQL	mg/Kg	J	Q, E, A
SILVER	0.0203	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.410		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	41.6		0.0236	MDL	0.107	PQL	mg/Kg	J	E
ZINC	64.7		0.601	MDL	3.22	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
HEXAVALENT CHROMIUM	0.43	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-029-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 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
HEXAVALENT CHROMIUM	0.74	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-031-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 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
HEXAVALENT CHROMIUM	0.40	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-041-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 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
HEXAVALENT CHROMIUM	0.28	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-333-SA5B-SB-4.0-5.0 *Collected:* 2/16/2011 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
HEXAVALENT CHROMIUM	0.24	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-025-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 1:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0221	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5A-SS-0.0-0.5 *Collected:* 2/16/2011 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
MERCURY	0.0438	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.6	U	6.6	MDL	14	PQL	mg/Kg	UJ	Q

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.17	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	0.22	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.059	J	0.042	MDL	0.19	PQL	ug/Kg	J	Z
DIELDRIN	0.18	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.16	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
MIREX	0.32	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.10	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDE	0.32	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
ENDOSULFAN SULFATE	0.13	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.20	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.056	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z
MIREX	0.23	J	0.074	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	0.083	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: **SL-029-SA5A-SS-0.0-0.5** *Collected:* **2/16/2011 1:10:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.15	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
4,4'-DDT	0.37	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z
MIREX	0.23	J	0.075	MDL	0.39	PQL	ug/Kg	J	Z

Sample ID: **SL-031-SA5A-SS-0.0-0.5** *Collected:* **2/16/2011 11:10:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.13	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.12	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z, S
ENDRIN ALDEHYDE	1.5		0.075	MDL	0.38	PQL	ug/Kg	J	S
HEPTACHLOR EPOXIDE	0.095	J	0.038	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: **SL-032-SA5A-SS-0.0-0.5** *Collected:* **2/16/2011 9:20:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.17	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.27	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.093	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
MIREX	0.081	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** *Collected:* **2/16/2011 10:30:00** *Analysis Type:* **RES-BASE/NEUTRAL** *Dilution:* **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	5.7		0.72	MDL	3.7	PQL	ug/Kg	J	S
AROCLOR 1260	14		0.85	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5432	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5460	12		2.2	MDL	7.2	PQL	ug/Kg	J	S, L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.2		0.91	MDL	4.0	PQL	ug/Kg	J	S
Aroclor 5460	10		2.3	MDL	7.7	PQL	ug/Kg	J	S

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	7.2		0.37	MDL	1.9	PQL	ug/Kg	J	S
AROCLOR 1260	6.1		0.44	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5460	7.1		1.1	MDL	3.7	PQL	ug/Kg	J	S

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.88	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 11:10:00** ***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 1254	0.60	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S
AROCLOR 1260	1.2	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z, S

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	1.6	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	2.5	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.2	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z, S
Aroclor 5460	2.1	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
2,4,5-TP (Silvex)	0.31		0.082	MDL	0.18	PQL	ug/Kg	J	Q
DICAMBA	0.44	U	0.44	MDL	1.3	PQL	ug/Kg	R	Q
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.48	J	0.47	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:45:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
DALAPON	4.9	U	4.9	MDL	10	PQL	ug/Kg	R	Q
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPP	170	J	83	MDL	280	PQL	ug/Kg	U	B

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
DICAMBA	0.92	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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
DICAMBA	0.51	J	0.45	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-032-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 9:20:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-041-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 9:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-024-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 10:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 10:45:00 ***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	72	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	41	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-028-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 12:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	18	MDL	370	PQL	ug/Kg	U	B

Sample ID: SL-031-SA5A-SS-0.0-0.5 ***Collected:*** 2/16/2011 11:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	38	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	96	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	140	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	180	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZOFURAN	19	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 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
BENZO(A)PYRENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: **SL-024-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 10:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.61	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	24		6.5	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	9.6	J	6.5	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.77	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.5	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-025-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:28:00** ***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	0.83	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.93	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	7.0	MDL	21	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.8	J	7.0	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.95	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.78	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-026-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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-METHYLNAPHTHALENE	0.81	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.87	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.82	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	33		6.7	MDL	20	PQL	ug/Kg	U	B
Di-n-butylphthalate	25		6.7	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	0.89	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-028-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 12:55:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Butylbenzylphthalate	7.3	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.7	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-029-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.69	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	19	J	6.8	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.91	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.8	MDL	20	PQL	ug/Kg	U	B

Sample ID: **SL-031-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 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-METHYLNAPHTHALENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.2	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	15	J	6.8	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	7.2	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	10	J	6.8	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	1.4	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.53	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.45	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.81	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.2	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	U	B
Di-n-octylphthalate	15	J	6.6	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-032-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:20:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-041-SA5A-SS-0.0-0.5** ***Collected:*** **2/16/2011 9:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.51	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.38	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.84	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.86	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.89	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	21		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	0.77	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-332-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 4:16:00** ***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	21		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	18	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	U	B
PHENANTHRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-333-SA5B-SB-4.0-5.0** ***Collected:*** **2/16/2011 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
ANTHRACENE	0.62	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.82	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.79	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	6.9	MDL	21	PQL	ug/Kg	U	B
Butylbenzylphthalate	7.2	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-333-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 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
Di-n-butylphthalate	8.4	J	6.9	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-335-SA5B-SB-2.0-3.0 ***Collected:*** 2/16/2011 10:57:00 ***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	15	J	6.6	MDL	20	PQL	ug/Kg	U	B

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-335-SA5B-SB-2.0-3.0 ***Collected:*** 2/16/2011 10:57:00 ***Analysis Type:*** REA4 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	310	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-332-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 4:16:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.17	U	0.17	MDL	3.7	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.15	U	0.15	MDL	3.7	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.52	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-333-SA5B-SB-4.0-5.0 ***Collected:*** 2/16/2011 12:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,4-TRICHLOROBENZENE	0.18	U	0.18	MDL	3.9	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.16	U	0.16	MDL	3.9	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.67	J	0.24	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-335-SA5B-SB-2.0-3.0** ***Collected:*** **2/16/2011 10:57:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **0.96**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
1,2,4-TRICHLOROBENZENE	0.19	U	0.19	MDL	4.2	PQL	ug/Kg	UJ	L
CIS-1,3-DICHLOROPROPENE	0.17	U	0.17	MDL	4.2	PQL	ug/Kg	UJ	L
METHYLENE CHLORIDE	0.68	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: PrepDE083_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE083

Method Blank Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04808AB220232	2/21/2011 2:32:00 AM	PHOSPHORUS TIN	1.08 mg/Kg 1.35 mg/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0
P04808AB220550	2/22/2011 5:50:00 AM	LITHIUM	0.63 mg/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

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-024-SA5A-SS-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SL-025-SA5A-SS-0.0-0.5(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-026-SA5A-SS-0.0-0.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg
SL-028-SA5A-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-029-SA5A-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-031-SA5A-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-032-SA5A-SS-0.0-0.5(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-041-SA5A-SS-0.0-0.5(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	TIN	2.87 mg/Kg	2.87U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04826AB221142A	2/28/2011 11:42:00 AM	COPPER LEAD	0.162 mg/Kg 0.0131 mg/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P54548AB241603A	2/24/2011 4:03:00 PM	2,4-DB MCPP	0.75 ug/Kg 210 ug/Kg	SL-032-SA5A-SS-0.0-0.5
P57575AB241849A	2/28/2011 6:49:00 PM	MCPP	350 ug/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-041-SA5A-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-028-SA5A-SS-0.0-0.5(RES)	MCPP	170 ug/Kg	280U ug/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB74B211252A	2/17/2011 12:52:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.14 ug/Kg 0.39 ug/Kg 0.11 ug/Kg	SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

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-332-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.52 ug/Kg	3.7U ug/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.67 ug/Kg	3.9U ug/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.68 ug/Kg	4.2U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLG05B261510	2/26/2011 3:10:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	20 ug/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

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-028-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	35 ug/Kg	370U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLJ05B260014	2/25/2011 12:14:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	9.4 ug/Kg 6.5 ug/Kg	SL-024-SA5A-SS-0.0-0.5 SL-025-SA5A-SS-0.0-0.5 SL-026-SA5A-SS-0.0-0.5 SL-028-SA5A-SS-0.0-0.5 SL-029-SA5A-SS-0.0-0.5 SL-031-SA5A-SS-0.0-0.5 SL-032-SA5A-SS-0.0-0.5 SL-041-SA5A-SS-0.0-0.5 SL-332-SA5B-SB-4.0-5.0 SL-333-SA5B-SB-4.0-5.0 SL-335-SA5B-SB-2.0-3.0

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-024-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	24 ug/Kg	24U ug/Kg
SL-024-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	10 ug/Kg	20U ug/Kg
SL-025-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	21U ug/Kg
SL-026-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	33 ug/Kg	33U ug/Kg
SL-026-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	25 ug/Kg	25U ug/Kg
SL-028-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	13 ug/Kg	20U ug/Kg
SL-029-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	11 ug/Kg	20U ug/Kg
SL-031-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	15 ug/Kg	20U ug/Kg
SL-031-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	10 ug/Kg	20U ug/Kg
SL-032-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	18 ug/Kg	20U ug/Kg
SL-032-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	11 ug/Kg	20U ug/Kg
SL-041-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	21U ug/Kg
SL-041-SA5A-SS-0.0-0.5(RES)	Di-n-butylphthalate	14 ug/Kg	20U ug/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	21 ug/Kg	21U ug/Kg
SL-332-SA5B-SB-4.0-5.0(RES)	Di-n-butylphthalate	14 ug/Kg	20U ug/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	21U ug/Kg
SL-333-SA5B-SB-4.0-5.0(RES)	Di-n-butylphthalate	8.4 ug/Kg	21U ug/Kg
SL-335-SA5B-SB-2.0-3.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	15 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_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-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM	- 140 - 135 131 138 -	165 154 148 242 160 156 143	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	- - - - - - -	CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM	J (all detects) Pb No Qual, >4x
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	ANTIMONY ARSENIC CADMIUM VANADIUM ZINC	41 48 138 59 58	63 - 182 143 183	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	29 (20.00) - 24 (20.00) - -	ANTIMONY ARSENIC CADMIUM VANADIUM ZINC	J(all detects) UJ(all non-detects) V, Zn No Qual, >4x
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	SELENIUM	128	157	75.00-125.00	-	SELENIUM	J(all detects)
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	MOLYBDENUM	136	156	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5 SL -332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	BARIUM	-20	168	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_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-SA5A-SS-0.0-0.5MS	ALUMINUM	1237	1545	75.00-125.00	-	ALUMINUM	
SL-024-SA5A-SS-0.0-0.5MSD	CALCIUM	181	183	75.00-125.00	-	CALCIUM	
(SL-024-SA5A-SS-0.0-0.5	IRON	218	661	75.00-125.00	-	IRON	
SL-025-SA5A-SS-0.0-0.5	MAGNESIUM	147	230	75.00-125.00	-	MAGNESIUM	
SL-026-SA5A-SS-0.0-0.5	POTASSIUM	-	137	75.00-125.00	-	POTASSIUM	
SL-028-SA5A-SS-0.0-0.5	TITANIUM	291	312	75.00-125.00	-	TITANIUM	
SL-029-SA5A-SS-0.0-0.5							J(all detects)
SL-031-SA5A-SS-0.0-0.5							
SL-032-SA5A-SS-0.0-0.5							Al, Ca, Fe,
SL-041-SA5A-SS-0.0-0.5							Mg, Ti
SL-332-SA5B-SB-4.0-5.0							No Qual, >4x
SL-333-SA5B-SB-4.0-5.0							
SL-335-SA5B-SB-2.0-3.0)							

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-025-SA5A-SS-0.0-0.5MS	FLUORIDE	51	-	80.00-120.00	-	FLUORIDE	
(SL-024-SA5A-SS-0.0-0.5							
SL-025-SA5A-SS-0.0-0.5							
SL-026-SA5A-SS-0.0-0.5							
SL-028-SA5A-SS-0.0-0.5							J(all detects)
SL-029-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL-031-SA5A-SS-0.0-0.5							
SL-032-SA5A-SS-0.0-0.5							
SL-041-SA5A-SS-0.0-0.5							
SL-332-SA5B-SB-4.0-5.0							
SL-333-SA5B-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-332-SA5B-SB-4.0-5.0MSD (SL-332-SA5B-SB-4.0-5.0)	ETHYLENE GLYCOL	-	-	63.00-107.00	21 (20.00)	ETHYLENE GLYCOL	J(all detects)
SL-332-SA5B-SB-4.0-5.0MS **SL-332-SA5B-SB-4.0-5.0MSD** (SL-332-SA5B-SB-4.0-5.0)	DIETHYLENE GLYCOL	52	-	59.00-109.00	33 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)
SL-332-SA5B-SB-4.0-5.0MS	EFH (C21-C30)	2133	5256	49.00-123.00	-	EFH (C21-C30)	No Qual
SL-332-SA5B-SB-4.0-5.0MSD (SL-332-SA5B-SB-4.0-5.0)	EFH (C30-C40)	16238	25509	49.00-123.00	-	EFH (C30-C40)	Diluted Out
SL-332-SA5B-SB-4.0-5.0MS	EFH (C12-C14)	0	0	49.00-123.00	-	EFH (C12-C14)	No Qual
SL-332-SA5B-SB-4.0-5.0MSD	EFH (C15-C20)	0	0	49.00-123.00	-	EFH (C15-C20)	Diluted Out
(SL-332-SA5B-SB-4.0-5.0)	EFH (C8-C11)	0	0	49.00-123.00	-	EFH (C8-C11)	

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5)	2,4-DB DALAPON MCPA	- 253 235	241 - -	20.00-170.00 12.00-86.00 31.00-184.00	108 (50.00) 116 (50.00) 90 (50.00)	2,4-DB DALAPON MCPA	J(all detects)
SL-024-SA5A-SS-0.0-0.5MS **SL-024-SA5A-SS-0.0-0.5MSD** (SL-024-SA5A-SS-0.0-0.5)	DICAMBA	-2	-222	33.00-120.00	126 (50.00)	DICAMBA	J(all detects) R(all non-detects)
SL-024-SA5A-SS-0.0-0.5MS (SL-024-SA5A-SS-0.0-0.5)	2,4,5-TP (Silvex)	7	-	10.00-183.00	-	2,4,5-TP (Silvex)	J(all detects) UJ(all non-detects)
SL-028-SA5A-SS-0.0-0.5MS **SL-028-SA5A-SS-0.0-0.5MSD** (SL-028-SA5A-SS-0.0-0.5)	DICAMBA	205	193	33.00-120.00	-	DICAMBA	J(all detects)
SL-028-SA5A-SS-0.0-0.5MS **SL-028-SA5A-SS-0.0-0.5MSD** (SL-028-SA5A-SS-0.0-0.5)	DALAPON	0	-	12.00-86.00	200 (50.00)	DALAPON	J(all detects) R(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5A-SS-0.0-0.5DUP	ANTIMONY	55	20.00	
(SL-024-SA5A-SS-0.0-0.5	ARSENIC	23	20.00	
SL-025-SA5A-SS-0.0-0.5	BARIUM	21	20.00	
SL-026-SA5A-SS-0.0-0.5	CADMIUM	29	20.00	
SL-028-SA5A-SS-0.0-0.5	COBALT	27	20.00	
SL-029-SA5A-SS-0.0-0.5	COPPER	23	20.00	J (all detects)
SL-031-SA5A-SS-0.0-0.5	NICKEL	21	20.00	UJ (all non-detects)
SL-032-SA5A-SS-0.0-0.5	SILVER	81	20.00	
SL-041-SA5A-SS-0.0-0.5	THALLIUM	47	20.00	Sb, Cd, Ag, Tl
SL-332-SA5B-SB-4.0-5.0	VANADIUM	22	20.00	No Qual
SL-333-SA5B-SB-4.0-5.0				OK by difference
SL-335-SA5B-SB-2.0-3.0)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-024-SA5A-SS-0.0-0.5DUP	MERCURY	200	20.00	
(SL-024-SA5A-SS-0.0-0.5				
SL-025-SA5A-SS-0.0-0.5				
SL-026-SA5A-SS-0.0-0.5				
SL-028-SA5A-SS-0.0-0.5				
SL-029-SA5A-SS-0.0-0.5				No Qual
SL-031-SA5A-SS-0.0-0.5				OK by difference
SL-032-SA5A-SS-0.0-0.5				
SL-041-SA5A-SS-0.0-0.5				
SL-332-SA5B-SB-4.0-5.0				
SL-333-SA5B-SB-4.0-5.0				
SL-335-SA5B-SB-2.0-3.0)				

Method: 160.3M
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-032-SA5A-SS-0.0-0.5DUP	MOISTURE	35	20.00	
(SL-024-SA5A-SS-0.0-0.5				
SL-025-SA5A-SS-0.0-0.5				
SL-026-SA5A-SS-0.0-0.5				
SL-028-SA5A-SS-0.0-0.5				Not Validated
SL-029-SA5A-SS-0.0-0.5				
SL-031-SA5A-SS-0.0-0.5				
SL-032-SA5A-SS-0.0-0.5				
SL-041-SA5A-SS-0.0-0.5)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_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
P10537AQ240255A (SL-332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10547AY240525A (SL-024-SA5A-SS-0.0-0.5 SL -032-SA5A-SS-0.0-0.5)	Aroclor 5442	-	71	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10548AQ241631A (SL-032-SA5A-SS-0.0-0.5)	DINOSEB	7	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)
P10575AQ241916A (SL-024-SA5A-SS-0.0-0.5 SL -025-SA5A-SS-0.0-0.5 SL -026-SA5A-SS-0.0-0.5 SL -028-SA5A-SS-0.0-0.5 SL -029-SA5A-SS-0.0-0.5 SL -031-SA5A-SS-0.0-0.5 SL -041-SA5A-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSB74Q211326A (SL-332-SA5B-SB-4.0-5.0 SL -333-SA5B-SB-4.0-5.0 SL -335-SA5B-SB-2.0-3.0)	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	67 79	- -	68.00-120.00 80.00-120.00	- -	1,2,4-TRICHLOROBENZENE CIS-1,3-DICHLOROPROPENE	J(all detects) UJ(all non-detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-332-SA5B-SB-4.0-5.0	n-Triacontane-d62	427	50.00-150.00	All Target Analytes	J(all detects)
SL-333-SA5B-SB-4.0-5.0	n-Triacontane-d62	196	50.00-150.00	All Target Analytes	J(all detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-031-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	1024	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-024-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J (all detects)
SL-025-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)
SL-026-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)
SL-031-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	144	45.00-120.00	All Target Analytes	J(all detects)
SL-041-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	135	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	BORON	J	1.90	5.28	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.6	106	PQL	mg/Kg	
	TIN	J	2.59	10.6	PQL	mg/Kg	
	Zirconium	J	2.20	5.28	PQL	mg/Kg	
SL-025-SA5A-SS-0.0-0.5	BORON	J	3.37	5.71	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.4	114	PQL	mg/Kg	
	TIN	J	2.80	11.4	PQL	mg/Kg	
	Zirconium	J	2.33	5.71	PQL	mg/Kg	
SL-026-SA5A-SS-0.0-0.5	BORON	J	1.55	5.45	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.1	109	PQL	mg/Kg	
	TIN	J	2.88	10.9	PQL	mg/Kg	
	Zirconium	J	1.78	5.45	PQL	mg/Kg	
SL-028-SA5A-SS-0.0-0.5	BORON	J	2.54	5.33	PQL	mg/Kg	J (all detects)
	SODIUM	J	81.4	107	PQL	mg/Kg	
	TIN	J	2.61	10.7	PQL	mg/Kg	
	Zirconium	J	2.24	5.33	PQL	mg/Kg	
SL-029-SA5A-SS-0.0-0.5	BORON	J	2.67	5.61	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.5	112	PQL	mg/Kg	
	TIN	J	2.55	11.2	PQL	mg/Kg	
	Zirconium	J	2.46	5.61	PQL	mg/Kg	
SL-031-SA5A-SS-0.0-0.5	BORON	J	2.06	5.59	PQL	mg/Kg	J (all detects)
	SODIUM	J	78.9	112	PQL	mg/Kg	
	TIN	J	2.58	11.2	PQL	mg/Kg	
	Zirconium	J	1.96	5.59	PQL	mg/Kg	
SL-032-SA5A-SS-0.0-0.5	BORON	J	1.54	5.37	PQL	mg/Kg	J (all detects)
	SODIUM	J	71.0	107	PQL	mg/Kg	
	TIN	J	3.01	10.7	PQL	mg/Kg	
	Zirconium	J	1.30	5.37	PQL	mg/Kg	
SL-041-SA5A-SS-0.0-0.5	BORON	J	1.41	5.48	PQL	mg/Kg	J (all detects)
	SODIUM	J	66.6	110	PQL	mg/Kg	
	TIN	J	2.50	11.0	PQL	mg/Kg	
	Zirconium	J	1.39	5.48	PQL	mg/Kg	
SL-332-SA5B-SB-4.0-5.0	TIN	J	2.49	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.914	5.34	PQL	mg/Kg	
SL-333-SA5B-SB-4.0-5.0	BORON	J	1.04	5.66	PQL	mg/Kg	J (all detects)
	TIN	J	2.74	11.3	PQL	mg/Kg	
SL-335-SA5B-SB-2.0-3.0	TIN	J	2.87	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.965	5.42	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	SELENIUM	J	0.253	0.427	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0856	0.107	PQL	mg/Kg	
SL-025-SA5A-SS-0.0-0.5	SELENIUM	J	0.270	0.453	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5A-SS-0.0-0.5	SELENIUM	J	0.133	0.432	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0551	0.108	PQL	mg/Kg	
SL-028-SA5A-SS-0.0-0.5	ANTIMONY	J	0.209	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.196	0.443	PQL	mg/Kg	
	SILVER	J	0.0480	0.111	PQL	mg/Kg	
SL-029-SA5A-SS-0.0-0.5	ANTIMONY	J	0.142	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.180	0.440	PQL	mg/Kg	
	SILVER	J	0.0535	0.110	PQL	mg/Kg	
SL-031-SA5A-SS-0.0-0.5	ANTIMONY	J	0.197	0.217	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0658	0.109	PQL	mg/Kg	
SL-032-SA5A-SS-0.0-0.5	ANTIMONY	J	0.160	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.169	0.442	PQL	mg/Kg	
	SILVER	J	0.0620	0.111	PQL	mg/Kg	
SL-041-SA5A-SS-0.0-0.5	ANTIMONY	J	0.0932	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.108	0.439	PQL	mg/Kg	
	SILVER	J	0.0431	0.110	PQL	mg/Kg	
SL-332-SA5B-SB-4.0-5.0	ANTIMONY	J	0.136	0.218	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0881	0.109	PQL	mg/Kg	
	SELENIUM	J	0.231	0.436	PQL	mg/Kg	
	SILVER	J	0.0273	0.109	PQL	mg/Kg	
SL-333-SA5B-SB-4.0-5.0	ANTIMONY	J	0.0824	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0977	0.453	PQL	mg/Kg	
	SILVER	J	0.0273	0.113	PQL	mg/Kg	
SL-335-SA5B-SB-2.0-3.0	ANTIMONY	J	0.180	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0459	0.107	PQL	mg/Kg	
	SELENIUM	J	0.183	0.429	PQL	mg/Kg	
	SILVER	J	0.0203	0.107	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-026-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.1	PQL	mg/Kg	J (all detects)
SL-028-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-029-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.74	1.1	PQL	mg/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-041-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-333-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.24	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SS-0.0-0.5	MERCURY	J	0.0221	0.115	PQL	mg/Kg	J (all detects)
SL-026-SA5A-SS-0.0-0.5	MERCURY	J	0.0438	0.105	PQL	mg/Kg	J (all detects)

Method: 8015B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-335-SA5B-SB-2.0-3.0	METHANOL	J	310	550	PQL	ug/Kg	J (all detects)

Method: 8081A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	DIELDRIN	J	0.17	0.37	PQL	ug/Kg	J (all detects)
	ENDOSULFAN SULFATE	J	0.22	0.37	PQL	ug/Kg	
SL-025-SA5A-SS-0.0-0.5	DELTA-BHC	J	0.059	0.19	PQL	ug/Kg	J (all detects)
	DIELDRIN	J	0.18	0.40	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.16	0.40	PQL	ug/Kg	
	MIREX	J	0.32	0.40	PQL	ug/Kg	
SL-026-SA5A-SS-0.0-0.5	4,4'-DDD	J	0.10	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDE	J	0.32	0.38	PQL	ug/Kg	
	ENDOSULFAN SULFATE	J	0.13	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.20	0.38	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.056	0.19	PQL	ug/Kg	
	MIREX	J	0.23	0.38	PQL	ug/Kg	
SL-028-SA5A-SS-0.0-0.5	4,4'-DDT	J	0.083	0.38	PQL	ug/Kg	J (all detects)
SL-029-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.15	0.39	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.37	0.39	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.11	0.39	PQL	ug/Kg	
	MIREX	J	0.23	0.39	PQL	ug/Kg	
SL-031-SA5A-SS-0.0-0.5	ALPHA-BHC	J	0.13	0.19	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.12	0.19	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.095	0.19	PQL	ug/Kg	
SL-032-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.17	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.27	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.093	0.38	PQL	ug/Kg	
	MIREX	J	0.081	0.38	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.4	3.8	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	0.60 1.2	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-032-SA5A-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.6 1.1 2.5	1.9 1.9 3.7	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-041-SA5A-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.2 2.1	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-025-SA5A-SS-0.0-0.5	DICAMBA	J	0.48	1.4	PQL	ug/Kg	J (all detects)
SL-028-SA5A-SS-0.0-0.5	MCPP	J	170	280	PQL	ug/Kg	J (all detects)
SL-029-SA5A-SS-0.0-0.5	DICAMBA	J	0.92	1.4	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	DICAMBA	J	0.51	1.4	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-332-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.52	3.7	PQL	ug/Kg	J (all detects)
SL-333-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.67	3.9	PQL	ug/Kg	J (all detects)
SL-335-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.68	4.2	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	CHRYSENE	J	25	180	PQL	ug/Kg	J (all detects)
SL-026-SA5A-SS-0.0-0.5	BENZO(A)PYRENE BENZO(G,H,I)PERYLENE	J J	72 41	190 190	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-028-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	370	PQL	ug/Kg	J (all detects)
SL-031-SA5A-SS-0.0-0.5	ACENAPHTHENE ANTHRACENE CARBAZOLE DIBENZO(A,H)ANTHRACENE DIBENZOFURAN FLUORENE	J J J J J J	38 96 140 180 19 26	190 190 190 190 190 190	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-333-SA5B-SB-4.0-5.0	BENZO(A)PYRENE	J	20	190	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-024-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.61	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.6	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.77	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	20	PQL	ug/Kg	
SL-025-SA5A-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.83	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.93	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	21	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.95	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	
SL-026-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.81	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.87	1.9	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.82	1.9	PQL	ug/Kg	
	ANTHRACENE	J	1.4	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.89	1.9	PQL	ug/Kg	
SL-028-SA5A-SS-0.0-0.5	Butylbenzylphthalate	J	7.3	20	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
SL-029-SA5A-SS-0.0-0.5	ANTHRACENE	J	0.69	1.9	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	19	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.91	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	20	PQL	ug/Kg	
SL-031-SA5A-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.2	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	10	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-032-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.53	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.45	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.81	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	11	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	15	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	
	PYRENE	J	1.5	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE083 **Laboratory: LL**

EDD Filename: DE083_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-041-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.51	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.38	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.84	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.86	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.89	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.5	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	14	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.77	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.8	PQL	ug/Kg	
SL-332-SA5B-SB-4.0-5.0	Butylbenzylphthalate	J	18	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	14	20	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
SL-333-SA5B-SB-4.0-5.0	ANTHRACENE	J	0.62	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.82	1.9	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.79	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	21	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	21	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.4	21	PQL	ug/Kg	
SL-335-SA5B-SB-2.0-3.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	20	PQL	ug/Kg	J (all detects)

LDC #: 25764G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/11
SDG #: DE083 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Pb, Mg, Mn, K, Ti, V, Zn >4X)
VII.	Duplicate Sample Analysis	N	D (Sb, Cd, Hg, Ag, Tl <4x RL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J (UJ/A)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-024-SA5A-SS-0.0-0.5	11	SL-335-SA5B-SB-2.0-3.0	21		31	
2	SL-025-SA5A-SS-0.0-0.5	12	(#1) MS	22		32	
3	SL-026-SA5A-SS-0.0-0.5	13	MSD	23		33	
4	SL-028-SA5A-SS-0.0-0.5	14	DUP	24		34	
5	SL-029-SA5A-SS-0.0-0.5	15		25		35	
6	SL-031-SA5A-SS-0.0-0.5	16		26		36	
7	SL-032-SA5A-SS-0.0-0.5	17		27		37	
8	SL-041-SA5A-SS-0.0-0.5	18		28		38	
9	SL-332-SA5B-SB-4.0-5.0	19		29		39	
10	SL-333-SA5B-SB-4.0-5.0	20		30		40	

Notes:

LDC #: 25764G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CK
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	3	7	8	9	11						
Zr			3.9	1.95	1.8	1.3	1.4	0.91	0.97						

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 3, 5 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	5										
Cd			0.21	0.21	0.17										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2, 10 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	10										
Mo			0.26	0.26	0.22										

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.

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE083
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6208342BKG Serial Dilution Lab Sample ID: 6208342L
Batch ID(s): P04808A, P04826A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		128556.8600		129047.7000		0		P
Antimony	121	1.4320		1.5065	B	5		MS
Arsenic	75	29.2500		23.4550		20		MS
Barium	137	663.6000		529.5000		20	E	MS
Beryllium	9	2.7110		3.1855		18		MS
Boron		17.9700	B	44.5000	U	100		P
Cadmium	111	1.3990		1.7755	B	27		MS
Calcium		22191.8900		23498.2500		6		P
Chromium	52	124.3000		102.1500		18	E	MS
Cobalt	59	39.3000		34.5500		12	E	MS
Copper	63	71.6400		58.4000		18	E	MS
Iron		159013.1400		168316.5000		6		P
Lead	208	103.0000		85.5500		17	E	MS
Lithium		195.4800		355.2500		82	E	P
Magnesium		34273.8600		36329.0500		6		P
Manganese		3021.7700		3188.0000		6		P
Molybdenum	98	5.0530		4.2200		16		MS
Nickel	60	83.0600		73.7000		11	E	MS
Phosphorus		4306.7400		4466.4500		4		P
Potassium		30900.9400		32447.5500		5		P
Selenium	78	1.1840	B	1.0625	B	10		MS
Silver	107	0.4013	B	0.4166	B	4		MS
Sodium		639.8100	B	1865.0000	U	100		P
Strontium		172.2100		182.7000		6		P
Thallium	203	1.8650		1.6055	B	14		MS
Tin		24.5300	B	50.0000	U	100		P
Titanium		10533.5100		11263.9000		7		P
Vanadium	51	243.1000		219.1500		10		MS
Zinc	66	421.4000		373.9500		11	E	MS
Zirconium		20.7900	B	42.0000	U	100		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE084

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-Feb-2011	TB-021711	6209570	TB	5030B	8015M	III
17-Feb-2011	TB-021711	6209570	TB	5030B	8260B	III
17-Feb-2011	TB-021711	6209570	TB	5030B	8260B SIM	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3050B	6010B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3050B	6020	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3060A	7199	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3546	1625C	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8015B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8015M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8082	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8270C	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	3550B	8270C SIM	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	5035	8015M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	5035	8260B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	5035	8260B SIM	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	8330	8330A	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	Gen Prep	9045M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	300.0	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	314.0	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	7471A	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	8015B	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	8015M	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	8315A	III
17-Feb-2011	SL-336-SA5B-SB-4.0-5.0	6209568	N	METHOD	9012B	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3050B	6010B	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	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
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3060A	7199	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8081A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8082	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8151A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8270C	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	3550B	8270C SIM	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	Gen Prep	9045M	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	METHOD	300.0	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	METHOD	314.0	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5	6209558	N	METHOD	7471A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5MSD	P209558M241902A	MSD	3550B	8081A	III
17-Feb-2011	SL-022-SA5A-SS-0.0-0.5MS	P209558R241848A	MS	3550B	8081A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3060A	7199	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8081A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8082	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8151A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8270C	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	3550B	8270C SIM	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	Gen Prep	9045M	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	METHOD	300.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	METHOD	314.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5	6209557	N	METHOD	7471A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D220828	DUP	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D220933	DUP	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
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221127A	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221127C	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221127D	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D221627B	DUP	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D271448A	DUP	METHOD	314.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D272216A	DUP	METHOD	300.0	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5DUP	P209557D291050A	DUP	Gen Prep	9045M	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M220835	MSD	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M220935	MSD	METHOD	7471A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221133A	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221133C	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221133D	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M221631B	MSD	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M240916A	MSD	3550B	8082	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M260416	MSD	3550B	8270C SIM	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MSD	P209557M260530	MSD	3550B	8270C	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R220831	MS	3050B	6010B	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R220934	MS	METHOD	7471A	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221130A	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221130C	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221130D	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R221629B	MS	3050B	6020	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R240853A	MS	3550B	8082	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R260341	MS	3550B	8270C SIM	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R260504	MS	3550B	8270C	III
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R271512A	MS	METHOD	314.0	III

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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
17-Feb-2011	SL-021-SA5A-SS-0.0-0.5MS	P209557R272231A	MS	METHOD	300.0	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3050B	6010B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3050B	6020	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3060A	7199	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3546	1625C	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8015B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8015M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8082	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8270C	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	3550B	8270C SIM	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	5035	8015M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	5035	8260B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	5035	8260B SIM	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	8330	8330A	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	Gen Prep	9045M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	300.0	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	314.0	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	7471A	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	8015B	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	8015M	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	8315A	III
17-Feb-2011	SL-337-SA5B-SB-3.0-4.0	6209569	N	METHOD	9012B	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3050B	6010B	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3050B	6020	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3060A	7199	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8081A	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
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8082	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8151A	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8270C	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	3550B	8270C SIM	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	Gen Prep	9045M	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	METHOD	300.0	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	METHOD	314.0	III
17-Feb-2011	SL-035-SA5A-SS-0.0-0.5	6209559	N	METHOD	7471A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3050B	6010B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3050B	6020	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3060A	7199	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3546	1625C	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8015B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8015M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8082	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8270C	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	3550B	8270C SIM	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	5035	8015M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	5035	8260B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	5035	8260B SIM	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	8330	8330A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	Gen Prep	9045M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	300.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	314.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	7471A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	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
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	8015M	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	8315A	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0	6209567	N	METHOD	9012B	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0DUP	P209567D270148B	DUP	METHOD	300.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0DUP	P209567D272000B	DUP	METHOD	314.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0MS	P209567R270204B	MS	METHOD	300.0	III
17-Feb-2011	SL-331-SA5B-SB-3.0-4.0MS	P209567R272024B	MS	METHOD	314.0	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3050B	6010B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3050B	6020	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3060A	7199	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3546	1625C	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8015B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8015M	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8082	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8270C	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	3550B	8270C SIM	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	5035	8015M	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	5035	8260B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	5035	8260B SIM	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	8330	8330A	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	Gen Prep	9045M	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	300.0	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	314.0	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	7471A	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	8015B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	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
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	8315A	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0	6209565	N	METHOD	9012B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0DUP	P209565D271007A	DUP	METHOD	9012B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0DUP	P209565D271831A	DUP	3060A	7199	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0MS	P209565R271008A	MS	METHOD	9012B	III
17-Feb-2011	SL-321-SA5B-SB-3.0-4.0MS	P209565R271800A	MS	3060A	7199	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3050B	6010B	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3050B	6020	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3060A	7199	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8081A	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8082	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8151A	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8270C	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	3550B	8270C SIM	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	Gen Prep	9045M	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	METHOD	300.0	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	METHOD	314.0	III
17-Feb-2011	SL-040-SA5A-SS-0.0-0.5	6209562	N	METHOD	7471A	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3050B	6010B	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3050B	6020	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3060A	7199	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8081A	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8082	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8151A	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	3550B	8270C	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	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
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	Gen Prep	9045M	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	300.0	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	314.0	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	6850	III
17-Feb-2011	SL-037-SA5A-SS-0.0-0.5	6209561	N	METHOD	7471A	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3050B	6010B	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3050B	6020	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3060A	7199	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8081A	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8082	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8151A	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8270C	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	3550B	8270C SIM	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	Gen Prep	9045M	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	METHOD	300.0	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	METHOD	314.0	III
17-Feb-2011	SL-036-SA5A-SS-0.0-0.5	6209560	N	METHOD	7471A	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3050B	6010B	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3050B	6020	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3060A	7199	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8081A	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8082	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8151A	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8270C	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	3550B	8270C SIM	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	Gen Prep	9045M	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
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	METHOD	300.0	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	METHOD	314.0	III
17-Feb-2011	SL-050-SA5A-SS-0.0-0.5	6209563	N	METHOD	7471A	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3050B	6010B	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3050B	6020	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3060A	7199	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8081A	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8082	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8151A	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8270C	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	3550B	8270C SIM	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	Gen Prep	9045M	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	METHOD	300.0	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	METHOD	314.0	III
17-Feb-2011	SL-051-SA5A-SS-0.0-0.5	6209564	N	METHOD	7471A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3050B	6010B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3050B	6020	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3060A	7199	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3546	1625C	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8015B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8015M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8082	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8270C	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	3550B	8270C SIM	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	5035	8015M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	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
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	5035	8260B SIM	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	8330	8330A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	Gen Prep	9045M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	300.0	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	314.0	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	7471A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	8015B	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	8015M	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	8315A	III
17-Feb-2011	SL-322-SA5B-SB-3.0-4.0	6209566	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory:** LL

EDD Filename: DE084_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
FLUORIDE	1.5		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	4.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
FLUORIDE	1.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***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

Sample ID: SL-040-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
FLUORIDE	1.2		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-050-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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	1.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 2:40:00 ***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		0.89	MDL	1.1	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	7.8		0.91	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-322-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 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
FLUORIDE	2.3		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SL-036-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PERCHLORATE	13.8	J	9.9	MDL	32.9	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 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
POTASSIUM	3140		20.0	MDL	55.7	PQL	mg/Kg	J	Q
SODIUM	80.8	J	41.5	MDL	111	PQL	mg/Kg	J	Z
TIN	2.65	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.935	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:25:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3290		19.4	MDL	53.8	PQL	mg/Kg	J	Q
SODIUM	96.9	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	2.76	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.71	J	0.903	MDL	5.38	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-035-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
POTASSIUM	3590		18.7	MDL	52.0	PQL	mg/Kg	J	Q
SODIUM	91.6	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.46	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3560		19.6	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	89.1	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.64	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.54	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3640		18.6	MDL	51.8	PQL	mg/Kg	J	Q
SODIUM	81.3	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	2.54	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.47	J	0.869	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-040-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
POTASSIUM	3860		19.1	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	78.8	J	39.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.68	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.60	J	0.893	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-050-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
POTASSIUM	3440		19.5	MDL	54.0	PQL	mg/Kg	J	Q
SODIUM	81.1	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.39	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
Zirconium	3.09	J	0.908	MDL	5.40	PQL	mg/Kg	J	Z

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3990		19.4	MDL	53.8	PQL	mg/Kg	J	Q
SODIUM	90.0	J	40.1	MDL	108	PQL	mg/Kg	J	Z
TIN	2.56	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	3.84	J	0.903	MDL	5.38	PQL	mg/Kg	J	Z

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4530		19.9	MDL	55.3	PQL	mg/Kg	J	Q
TIN	4.03	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.02	J	0.929	MDL	5.53	PQL	mg/Kg	J	Z

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 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
POTASSIUM	2690		19.2	MDL	53.4	PQL	mg/Kg	J	Q
TIN	2.97	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.45	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	3470		19.2	MDL	53.3	PQL	mg/Kg	J	Q
TIN	2.55	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 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
POTASSIUM	3330		20.8	MDL	57.7	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-336-SA5B-SB-4.0-5.0 ***Collected:*** 2/17/2011 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
TIN	2.61	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	2.46	J	0.970	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: SL-337-SA5B-SB-3.0-4.0 ***Collected:*** 2/17/2011 10:33:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
POTASSIUM	4490		20.1	MDL	56.0	PQL	mg/Kg	J	Q
TIN	2.90	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.25	J	0.940	MDL	5.60	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.149	J	0.0437	MDL	0.437	PQL	mg/Kg	U	B

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.722		0.0546	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.118	MDL	0.437	PQL	mg/Kg	J	A

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.288		0.0445	MDL	0.111	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.207	J	0.0655	MDL	0.218	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.48		0.0873	MDL	0.437	PQL	mg/Kg	J	Q
BERYLLIUM	0.703		0.0175	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	20.7		0.131	MDL	0.437	PQL	mg/Kg	J	Q, A
COBALT	6.49		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	10.6		0.0721	MDL	0.437	PQL	mg/Kg	J	Q, A
LEAD	10.1		0.0114	MDL	0.218	PQL	mg/Kg	J	Q, A
NICKEL	13.6		0.109	MDL	0.437	PQL	mg/Kg	J	Q, A
SILVER	0.0688	J	0.0131	MDL	0.109	PQL	mg/Kg	UJ	Q, B
VANADIUM	39.0		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A
ZINC	66.1		0.611	MDL	3.28	PQL	mg/Kg	J	A

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0422	MDL	0.422	PQL	mg/Kg	U	B

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.812		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.107	J	0.0430	MDL	0.108	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0632	MDL	0.211	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	6.03		0.0843	MDL	0.422	PQL	mg/Kg	J	Q
BERYLLIUM	0.688		0.0169	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	21.9		0.126	MDL	0.422	PQL	mg/Kg	J	Q, A
COBALT	6.93		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	11.4		0.0696	MDL	0.422	PQL	mg/Kg	J	Q, A
LEAD	14.0		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
NICKEL	14.3		0.105	MDL	0.422	PQL	mg/Kg	J	Q, A
SILVER	0.168		0.0126	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	41.2		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	74.6		0.590	MDL	3.16	PQL	mg/Kg	J	A

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	J	0.0420	MDL	0.420	PQL	mg/Kg	U	B

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.887		0.0525	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.113	MDL	0.420	PQL	mg/Kg	J	A

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.234		0.0630	MDL	0.210	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	4.68		0.0841	MDL	0.420	PQL	mg/Kg	J	Q
BERYLLIUM	0.597		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	21.1		0.126	MDL	0.420	PQL	mg/Kg	J	Q, A
COBALT	7.14		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COPPER	11.9		0.0693	MDL	0.420	PQL	mg/Kg	J	Q, A
LEAD	13.1		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, A
NICKEL	14.0		0.105	MDL	0.420	PQL	mg/Kg	J	Q, A
SILVER	0.0723	J	0.0126	MDL	0.105	PQL	mg/Kg	UJ	Q, B
VANADIUM	38.0		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	69.5		0.588	MDL	3.15	PQL	mg/Kg	J	A

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.124	J	0.0435	MDL	0.435	PQL	mg/Kg	U	B

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.00		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.117	MDL	0.435	PQL	mg/Kg	J	A

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.315		0.0652	MDL	0.217	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	6.95		0.0869	MDL	0.435	PQL	mg/Kg	J	Q
BERYLLIUM	0.658		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	28.1		0.130	MDL	0.435	PQL	mg/Kg	J	Q, A
COBALT	8.66		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	18.4		0.0717	MDL	0.435	PQL	mg/Kg	J	Q, A
LEAD	27.3		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
NICKEL	18.9		0.109	MDL	0.435	PQL	mg/Kg	J	Q, A
SILVER	0.0837	J	0.0130	MDL	0.109	PQL	mg/Kg	UJ	Q, B
VANADIUM	54.8		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	105		0.609	MDL	3.26	PQL	mg/Kg	J	A

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0426	MDL	0.426	PQL	mg/Kg	U	B

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.21		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.115	MDL	0.426	PQL	mg/Kg	J	A

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.276		0.0639	MDL	0.213	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	7.26		0.0853	MDL	0.426	PQL	mg/Kg	J	Q
BERYLLIUM	0.684		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	29.4		0.128	MDL	0.426	PQL	mg/Kg	J	Q, A
COBALT	8.75		0.0213	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	17.6		0.0703	MDL	0.426	PQL	mg/Kg	J	Q, A
LEAD	39.0		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	18.6		0.107	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0828	J	0.0128	MDL	0.107	PQL	mg/Kg	UJ	Q, B
VANADIUM	53.9		0.0234	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	116		0.597	MDL	3.20	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.111	J	0.0430	MDL	0.430	PQL	mg/Kg	U	B

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.856		0.0537	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.116	MDL	0.430	PQL	mg/Kg	J	A

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.201		0.0425	MDL	0.106	PQL	mg/Kg	U	B

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.163	J	0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	4.66		0.0859	MDL	0.430	PQL	mg/Kg	J	Q
BERYLLIUM	0.596		0.0172	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	22.6		0.129	MDL	0.430	PQL	mg/Kg	J	Q, A
COBALT	6.48		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	12.5		0.0709	MDL	0.430	PQL	mg/Kg	J	Q, A
LEAD	16.1		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	14.5		0.107	MDL	0.430	PQL	mg/Kg	J	Q, A
SILVER	0.0487	J	0.0129	MDL	0.107	PQL	mg/Kg	UJ	Q, B
VANADIUM	38.9		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	70.6		0.601	MDL	3.22	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0428	MDL	0.428	PQL	mg/Kg	U	B

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.782		0.0535	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	125		0.116	MDL	0.428	PQL	mg/Kg	J	A

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:20:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.227		0.0432	MDL	0.108	PQL	mg/Kg	U	B

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
ANTIMONY	0.150	J	0.0642	MDL	0.214	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.56		0.0856	MDL	0.428	PQL	mg/Kg	J	Q
BERYLLIUM	0.634		0.0171	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.128	MDL	0.428	PQL	mg/Kg	J	Q, A
COBALT	6.58		0.0214	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	11.8		0.0706	MDL	0.428	PQL	mg/Kg	J	Q, A
LEAD	10.6		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A
NICKEL	15.4		0.107	MDL	0.428	PQL	mg/Kg	J	Q, A
SILVER	0.0559	J	0.0128	MDL	0.107	PQL	mg/Kg	UJ	Q, B
VANADIUM	39.5		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	70.8		0.599	MDL	3.21	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.146	J	0.0430	MDL	0.430	PQL	mg/Kg	U	B

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.07		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.116	MDL	0.430	PQL	mg/Kg	J	A

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.221		0.0434	MDL	0.109	PQL	mg/Kg	U	B

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.183	J	0.0645	MDL	0.215	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	6.03		0.0860	MDL	0.430	PQL	mg/Kg	J	Q
BERYLLIUM	0.706		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.129	MDL	0.430	PQL	mg/Kg	J	Q, A
COBALT	8.04		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	15.7		0.0710	MDL	0.430	PQL	mg/Kg	J	Q, A
LEAD	18.9		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	18.1		0.108	MDL	0.430	PQL	mg/Kg	J	Q, A
SILVER	0.0712	J	0.0129	MDL	0.108	PQL	mg/Kg	UJ	Q, B
VANADIUM	46.5		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	95.8		0.602	MDL	3.23	PQL	mg/Kg	J	A

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

eporting Batch ID: DE084 Laboratory: LL

ilename: DE084_v1 eQAPP Name: CDM_SSFL_110509

a Category: METALS

d: 6020 Matrix: SO

ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* REA *Dilution:* 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
UM	0.166	J	0.0447	MDL	0.447	PQL	mg/Kg	U	B

ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* REA2 *Dilution:* 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DENUM	0.788		0.0558	MDL	0.112	PQL	mg/Kg	J	Q

ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* REA3 *Dilution:* 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
I	164		0.121	MDL	0.447	PQL	mg/Kg	J	A

ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* REA4 *Dilution:* 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IM	0.0673	J	0.0451	MDL	0.113	PQL	mg/Kg	U	B

ID: SL-321-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 1:09:00 *Analysis Type:* RES *Dilution:* 2

e	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NY	0.121	J	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q, E, B
C	14.5		0.0893	MDL	0.447	PQL	mg/Kg	J	Q
IUM	1.28		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
IUM	43.5		0.134	MDL	0.447	PQL	mg/Kg	J	Q, A
-	7.61		0.0223	MDL	0.112	PQL	mg/Kg	J	Q, A
R	31.8		0.0737	MDL	0.447	PQL	mg/Kg	J	Q, A
	19.4		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
	18.1		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
	0.0549	J	0.0134	MDL	0.112	PQL	mg/Kg	UJ	Q, B
UM	74.5		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, A
	180		0.625	MDL	3.35	PQL	mg/Kg	J	A

s a non-reportable result

Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0752	J	0.0419	MDL	0.419	PQL	mg/Kg	U	B

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.580		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	80.7		0.113	MDL	0.419	PQL	mg/Kg	J	A

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0858	J	0.0628	MDL	0.209	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.73		0.0838	MDL	0.419	PQL	mg/Kg	J	Q
BERYLLIUM	0.512		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	9.28		0.126	MDL	0.419	PQL	mg/Kg	J	Q, A
COBALT	4.37		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	2.76		0.0691	MDL	0.419	PQL	mg/Kg	J	Q, A
LEAD	6.38		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, A
NICKEL	4.37		0.105	MDL	0.419	PQL	mg/Kg	J	Q, A
SILVER	0.0188	J	0.0126	MDL	0.105	PQL	mg/Kg	UJ	Q, B
VANADIUM	24.6		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	80.6		0.587	MDL	3.14	PQL	mg/Kg	J	A

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.139	J	0.0431	MDL	0.431	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.910		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	142		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0887	J	0.0418	MDL	0.105	PQL	mg/Kg	U	B

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0646	MDL	0.215	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.64		0.0861	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	0.753		0.0172	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	20.6		0.129	MDL	0.431	PQL	mg/Kg	J	Q, A
COBALT	6.56		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	10.6		0.0710	MDL	0.431	PQL	mg/Kg	J	Q, A
LEAD	7.12		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
NICKEL	13.7		0.108	MDL	0.431	PQL	mg/Kg	J	Q, A
SILVER	0.0504	J	0.0129	MDL	0.108	PQL	mg/Kg	UJ	Q, B
VANADIUM	38.1		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, A
ZINC	75.6		0.603	MDL	3.23	PQL	mg/Kg	J	A

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.166	J	0.0444	MDL	0.444	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.73		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.120	MDL	0.444	PQL	mg/Kg	J	A

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.143		0.0453	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.140	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.94		0.0888	MDL	0.444	PQL	mg/Kg	J	Q
BERYLLIUM	0.716		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	21.1		0.133	MDL	0.444	PQL	mg/Kg	J	Q, A
COBALT	6.78		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	11.7		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, A
LEAD	8.49		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	14.4		0.111	MDL	0.444	PQL	mg/Kg	J	Q, A
SILVER	0.0421	J	0.0133	MDL	0.111	PQL	mg/Kg	UJ	Q, B
VANADIUM	40.5		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	90.8		0.622	MDL	3.33	PQL	mg/Kg	J	A

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.138	J	0.0443	MDL	0.443	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.58		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	140		0.120	MDL	0.443	PQL	mg/Kg	J	A

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.102	J	0.0452	MDL	0.113	PQL	mg/Kg	U	B

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.145	J	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, E, B
ARSENIC	5.41		0.0887	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	0.667		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	19.8		0.133	MDL	0.443	PQL	mg/Kg	J	Q, A
COBALT	6.21		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	10.1		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, A
LEAD	6.70		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	12.9		0.111	MDL	0.443	PQL	mg/Kg	J	Q, A
SILVER	0.0585	J	0.0133	MDL	0.111	PQL	mg/Kg	UJ	Q, B
VANADIUM	37.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, A
ZINC	79.9		0.621	MDL	3.32	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-021-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
HEXAVALENT CHROMIUM	0.42	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
HEXAVALENT CHROMIUM	0.45	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.54	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
HEXAVALENT CHROMIUM	0.39	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

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

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.60	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.49	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0113	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0080	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0117	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 2:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0067	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-331-SA5B-SB-3.0-4.0 ***Collected:*** 2/17/2011 11:44:00 ***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	21.2	J	17.9	MDL	35.9	PQL	ng/Kg	J	Z

Sample ID: SL-336-SA5B-SB-4.0-5.0 ***Collected:*** 2/17/2011 9:19:00 ***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	24.7	J	19.1	MDL	38.1	PQL	ng/Kg	J	Z

Sample ID: SL-337-SA5B-SB-3.0-4.0 ***Collected:*** 2/17/2011 10:33:00 ***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	25.3	J	18.8	MDL	37.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-331-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 11:44:00 *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)	0.48	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-336-SA5B-SB-4.0-5.0 *Collected:* 2/17/2011 9:19:00 *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)	0.71	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-337-SA5B-SB-3.0-4.0 *Collected:* 2/17/2011 10:33:00 *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)	0.94	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z
EFH (C8-C11)	0.58	J	0.45	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.11	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.11	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Sample ID: SL-022-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 9:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN ALDEHYDE	0.073	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.11	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA5A-SS-0.0-0.5 *Collected:* 2/17/2011 1:58:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.26	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.049	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.15	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.28	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.092	J	0.037	MDL	0.18	PQL	ug/Kg	J	Z
MIREX	0.30	J	0.071	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-040-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.098	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-050-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
4,4'-DDE	0.20	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z
4,4'-DDT	0.24	J	0.073	MDL	0.37	PQL	ug/Kg	J	Z

Sample ID: SL-051-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 2:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.18	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDE	0.15	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
4,4'-DDT	0.31	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN ALDEHYDE	0.12	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z
ENDRIN KETONE	0.083	J	0.073	MDL	0.38	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.60	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-022-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 9:25:00** ***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	1.2	J	0.42	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	3.3	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	5.4		0.86	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5432	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.2	PQL	ug/Kg	UJ	L
Aroclor 5460	8.6		2.2	MDL	7.2	PQL	ug/Kg	J	S, L

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.2	U	2.2	MDL	7.1	PQL	ug/Kg	UJ	L
Aroclor 5442	2.2	U	2.2	MDL	7.1	PQL	ug/Kg	UJ	L
Aroclor 5460	11		2.2	MDL	7.1	PQL	ug/Kg	J	L

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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
AROCLOR 1254	1.4	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	2.0	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.99	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.2	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 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
Aroclor 5432	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-336-SA5B-SB-4.0-5.0 ***Collected:*** 2/17/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-337-SA5B-SB-3.0-4.0 ***Collected:*** 2/17/2011 10:33:00 ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
DICAMBA	1.1	J	0.45	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPP	410		84	MDL	280	PQL	ug/Kg	U	B

Sample ID: SL-022-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:25:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	1.2	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L
MCPP	100	J	81	MDL	270	PQL	ug/Kg	U	B

Sample ID: SL-035-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 10:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SL-036-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:58:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-037-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:28:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-040-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 1:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-050-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 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
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-051-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 2:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: SL-021-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 9:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	UJ	Q
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	Q

Sample ID: SL-035-SA5A-SS-0.0-0.5 ***Collected:*** 2/17/2011 10:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	360	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***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	43	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***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	120	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-050-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 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	21	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***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	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***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	19	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-035-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 10:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.78	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.35	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.55	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.4	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.77	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-036-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:58:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.50	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.2	J	6.5	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.86	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.75	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-037-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:28:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.56	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.1	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.5	J	6.5	MDL	19	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.99	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.81	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.70	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.2	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	22		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: **SL-040-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 1:10:00** ***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	0.90	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-051-SA5A-SS-0.0-0.5** ***Collected:*** **2/17/2011 2:40:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.85	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.7	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 9:19:00** ***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(B)FLUORANTHENE	0.76	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.66	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***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	0.41	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-321-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 1:09:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.94**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: **SL-322-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 3:30:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.98**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.1	J	0.06	MDL	4.2	PQL	ug/Kg	J	Z
m,p-Xylene	0.27	J	0.18	MDL	4.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.54	J	0.25	MDL	4.2	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-331-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 11:44:00** ***Analysis Type:*** **RES** ***Dilution:*** **1.08**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.18	J	0.12	MDL	4.6	PQL	ug/Kg	J	Z
ETHYLBENZENE	0.17	J	0.07	MDL	4.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.56	J	0.20	MDL	4.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.80	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: **SL-336-SA5B-SB-4.0-5.0** ***Collected:*** **2/17/2011 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
ETHYLBENZENE	0.1	J	0.07	MDL	4.6	PQL	ug/Kg	J	Z
m,p-Xylene	0.30	J	0.20	MDL	4.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.8	J	0.28	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: **SL-337-SA5B-SB-3.0-4.0** ***Collected:*** **2/17/2011 10:33:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.91**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.14	J	0.12	MDL	4.1	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE084

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05208BB220810	2/22/2011 8:10:00 AM	PHOSPHORUS	1.25 mg/Kg	SL-021-SA5A-SS-0.0-0.5
		TIN	1.43 mg/Kg	SL-022-SA5A-SS-0.0-0.5
				SL-035-SA5A-SS-0.0-0.5
				SL-036-SA5A-SS-0.0-0.5
				SL-037-SA5A-SS-0.0-0.5
				SL-040-SA5A-SS-0.0-0.5
				SL-050-SA5A-SS-0.0-0.5
				SL-051-SA5A-SS-0.0-0.5
				SL-321-SA5B-SB-3.0-4.0
				SL-322-SA5B-SB-3.0-4.0
				SL-331-SA5B-SB-3.0-4.0
				SL-336-SA5B-SB-4.0-5.0
				SL-337-SA5B-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-021-SA5A-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-036-SA5A-SS-0.0-0.5(RES)	TIN	2.64 mg/Kg	2.64U mg/Kg
SL-037-SA5A-SS-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-051-SA5A-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	TIN	4.03 mg/Kg	4.03U mg/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05226BB221114A	3/3/2011 11:14:00 AM	ANTIMONY	0.141 mg/Kg	SL-021-SA5A-SS-0.0-0.5
		BERYLLIUM	0.0417 mg/Kg	SL-022-SA5A-SS-0.0-0.5
		COBALT	0.0570 mg/Kg	SL-035-SA5A-SS-0.0-0.5
		COPPER	0.135 mg/Kg	SL-036-SA5A-SS-0.0-0.5
		LEAD	0.0459 mg/Kg	SL-037-SA5A-SS-0.0-0.5
		NICKEL	0.138 mg/Kg	SL-040-SA5A-SS-0.0-0.5
		SILVER	0.0256 mg/Kg	SL-050-SA5A-SS-0.0-0.5
		VANADIUM	0.0749 mg/Kg	SL-051-SA5A-SS-0.0-0.5
		ZINC	0.568 mg/Kg	SL-321-SA5B-SB-3.0-4.0
				SL-322-SA5B-SB-3.0-4.0
				SL-331-SA5B-SB-3.0-4.0
				SL-336-SA5B-SB-4.0-5.0
				SL-337-SA5B-SB-3.0-4.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P05226BB221114C	3/3/2011 11:14:00 AM	MOLYBDENUM	0.0824 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0
P05226BB221114D	3/3/2011 11:14:00 AM	BARIUM	0.215 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0
P05226BB221615B	3/3/2011 4:15:00 PM	SELENIUM	0.0571 mg/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-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-021-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.149 mg/Kg	0.149U mg/Kg
SL-021-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.207 mg/Kg	0.207U mg/Kg
SL-021-SA5A-SS-0.0-0.5(RES)	SILVER	0.0688 mg/Kg	0.0688U mg/Kg
SL-022-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.127 mg/Kg	0.127U mg/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.149 mg/Kg	0.149U mg/Kg
SL-035-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.131 mg/Kg	0.131U mg/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.234 mg/Kg	0.234U mg/Kg
SL-035-SA5A-SS-0.0-0.5(RES)	SILVER	0.0723 mg/Kg	0.0723U mg/Kg
SL-036-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.124 mg/Kg	0.124U mg/Kg
SL-036-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.315 mg/Kg	0.315U mg/Kg
SL-036-SA5A-SS-0.0-0.5(RES)	SILVER	0.0837 mg/Kg	0.0837U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
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-037-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.116 mg/Kg	0.116U mg/Kg
SL-037-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.276 mg/Kg	0.276U mg/Kg
SL-037-SA5A-SS-0.0-0.5(RES)	SILVER	0.0828 mg/Kg	0.0828U mg/Kg
SL-040-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.111 mg/Kg	0.111U mg/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.163 mg/Kg	0.163U mg/Kg
SL-040-SA5A-SS-0.0-0.5(RES)	SILVER	0.0487 mg/Kg	0.0487U mg/Kg
SL-050-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.133 mg/Kg	0.133U mg/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.150 mg/Kg	0.150U mg/Kg
SL-050-SA5A-SS-0.0-0.5(RES)	SILVER	0.0559 mg/Kg	0.0559U mg/Kg
SL-051-SA5A-SS-0.0-0.5(REA)	SELENIUM	0.146 mg/Kg	0.146U mg/Kg
SL-051-SA5A-SS-0.0-0.5(RES)	ANTIMONY	0.183 mg/Kg	0.183U mg/Kg
SL-051-SA5A-SS-0.0-0.5(RES)	SILVER	0.0712 mg/Kg	0.0712U mg/Kg
SL-321-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.166 mg/Kg	0.166U mg/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.121 mg/Kg	0.121U mg/Kg
SL-321-SA5B-SB-3.0-4.0(RES)	SILVER	0.0549 mg/Kg	0.0549U mg/Kg
SL-322-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.0752 mg/Kg	0.0752U mg/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.0858 mg/Kg	0.0858U mg/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	SILVER	0.0188 mg/Kg	0.0188U mg/Kg
SL-331-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.139 mg/Kg	0.139U mg/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.123 mg/Kg	0.123U mg/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	SILVER	0.0504 mg/Kg	0.0504U mg/Kg
SL-336-SA5B-SB-4.0-5.0(REA)	SELENIUM	0.166 mg/Kg	0.166U mg/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	ANTIMONY	0.140 mg/Kg	0.140U mg/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	SILVER	0.0421 mg/Kg	0.0421U mg/Kg
SL-337-SA5B-SB-3.0-4.0(REA)	SELENIUM	0.138 mg/Kg	0.138U mg/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	ANTIMONY	0.145 mg/Kg	0.145U mg/Kg
SL-337-SA5B-SB-3.0-4.0(RES)	SILVER	0.0585 mg/Kg	0.0585U mg/Kg

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P54548AB241603A	2/24/2011 4:03:00 PM	2,4-DB MCPP	0.75 ug/Kg 210 ug/Kg	SL-051-SA5A-SS-0.0-0.5

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P57575AB241849A	2/28/2011 6:49:00 PM	MCPP	350 ug/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-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-021-SA5A-SS-0.0-0.5(RES)	MCPP	410 ug/Kg	410U ug/Kg
SL-022-SA5A-SS-0.0-0.5(RES)	MCPP	100 ug/Kg	270U ug/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB76B211953A	2/18/2011 7:53:00 PM	METHYLENE CHLORIDE	0.30 ug/Kg	SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0
VBLKB77B212158A	2/24/2011 9:58:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	8.7 ug/Kg 1.1 ug/Kg 0.1 ug/Kg	SL-331-SA5B-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-321-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.3U ug/Kg
SL-322-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.54 ug/Kg	4.2U ug/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	4.6U ug/Kg
SL-331-SA5B-SB-3.0-4.0(RES)	TOLUENE	0.14 ug/Kg	4.6U ug/Kg
SL-336-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.8 ug/Kg	4.6U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLK05B262306	2/25/2011 11:06:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	9.5 ug/Kg 7.7 ug/Kg	SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-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-040-SA5A-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	22 ug/Kg	22U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_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-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	ARSENIC BERYLLIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	126 - 143 - 131 201 139 137 155 182	205 133 189 136 155 229 180 156 230 285	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 75.00-125.00 75.00-125.00	- - - - - - - - - -	ARSENIC BERYLLIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER VANADIUM ZINC	J (all detects) Zn No Qual, >4x
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	ANTIMONY	48	73	75.00-125.00	34 (20.00)	ANTIMONY	J(all detects) UJ(all non-detects)
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	MOLYBDENUM	137	163	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-021-SA5A-SS-0.0-0.5MS **SL-021-SA5A-SS-0.0-0.5MSD** (SL-021-SA5A-SS-0.0-0.5 SL -022-SA5A-SS-0.0-0.5 SL -035-SA5A-SS-0.0-0.5 SL -036-SA5A-SS-0.0-0.5 SL -037-SA5A-SS-0.0-0.5 SL -040-SA5A-SS-0.0-0.5 SL -050-SA5A-SS-0.0-0.5 SL -051-SA5A-SS-0.0-0.5 SL -321-SA5B-SB-3.0-4.0 SL -322-SA5B-SB-3.0-4.0 SL -331-SA5B-SB-3.0-4.0 SL -336-SA5B-SB-4.0-5.0 SL -337-SA5B-SB-3.0-4.0)	BARIUM	237	420	75.00-125.00	-	BARIUM	No Qual, >4x

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_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-021-SA5A-SS-0.0-0.5MS	ALUMINUM	2302	2326	75.00-125.00	-	ALUMINUM	
SL-021-SA5A-SS-0.0-0.5MSD	CALCIUM	203	233	75.00-125.00	-	CALCIUM	
(SL-021-SA5A-SS-0.0-0.5	IRON	1348	2145	75.00-125.00	-	IRON	J(all detects)
SL-022-SA5A-SS-0.0-0.5	MAGNESIUM	274	278	75.00-125.00	-	MAGNESIUM	
SL-035-SA5A-SS-0.0-0.5	MANGANESE	-	139	75.00-125.00	-	MANGANESE	Al, Ca, Fe,
SL-036-SA5A-SS-0.0-0.5	POTASSIUM	141	150	75.00-125.00	-	POTASSIUM	Mg, Mn, Ti
SL-037-SA5A-SS-0.0-0.5	TITANIUM	312	339	75.00-125.00	-	TITANIUM	No Qual, >4x
SL-040-SA5A-SS-0.0-0.5							
SL-050-SA5A-SS-0.0-0.5							
SL-051-SA5A-SS-0.0-0.5							
SL-321-SA5B-SB-3.0-4.0							
SL-322-SA5B-SB-3.0-4.0							
SL-331-SA5B-SB-3.0-4.0							
SL-336-SA5B-SB-4.0-5.0							
SL-337-SA5B-SB-3.0-4.0)							

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5A-SS-0.0-0.5MS (SL-021-SA5A-SS-0.0-0.5)	2,4,5-TRICHLOROPHENOL	111	-	78.00-109.00	-	2,4,5-TRICHLOROPHENOL	J(all detects)
SL-021-SA5A-SS-0.0-0.5MS	BENZIDINE	14	15	35.00-141.00	-	BENZIDINE	J(all detects)
SL-021-SA5A-SS-0.0-0.5MSD	BIS(2-CHLOROISOPROPYL) ET	1	-	55.00-142.00	195 (30.00)	BIS(2-CHLOROISOPROPYL) E	UJ(all non-detects)
(SL-021-SA5A-SS-0.0-0.5)							

Method: 300.0
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-021-SA5A-SS-0.0-0.5MS	FLUORIDE	50	-	80.00-120.00	-	FLUORIDE	
(SL-021-SA5A-SS-0.0-0.5							
SL-022-SA5A-SS-0.0-0.5							
SL-035-SA5A-SS-0.0-0.5							
SL-036-SA5A-SS-0.0-0.5							J(all detects)
SL-037-SA5A-SS-0.0-0.5							UJ(all non-detects)
SL-040-SA5A-SS-0.0-0.5							
SL-050-SA5A-SS-0.0-0.5							
SL-051-SA5A-SS-0.0-0.5							
SL-321-SA5B-SB-3.0-4.0							
SL-322-SA5B-SB-3.0-4.0)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-021-SA5A-SS-0.0-0.5DUP	FLUORIDE	40	20.00	
(SL-021-SA5A-SS-0.0-0.5	Nitrate-NO3	44	20.00	
SL -022-SA5A-SS-0.0-0.5				
SL -035-SA5A-SS-0.0-0.5				
SL -036-SA5A-SS-0.0-0.5				
SL -037-SA5A-SS-0.0-0.5				No Qual
SL -040-SA5A-SS-0.0-0.5				OK by difference
SL -050-SA5A-SS-0.0-0.5				
SL -051-SA5A-SS-0.0-0.5				
SL -321-SA5B-SB-3.0-4.0				
SL -322-SA5B-SB-3.0-4.0)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-021-SA5A-SS-0.0-0.5DUP	ANTIMONY	67	20.00	
(SL-021-SA5A-SS-0.0-0.5	SELENIUM	21	20.00	
SL -022-SA5A-SS-0.0-0.5	SILVER	44	20.00	
SL -035-SA5A-SS-0.0-0.5				
SL -036-SA5A-SS-0.0-0.5				
SL -037-SA5A-SS-0.0-0.5				
SL -040-SA5A-SS-0.0-0.5				No Qual
SL -050-SA5A-SS-0.0-0.5				OK by difference
SL -051-SA5A-SS-0.0-0.5				
SL -321-SA5B-SB-3.0-4.0				
SL -322-SA5B-SB-3.0-4.0				
SL -331-SA5B-SB-3.0-4.0				
SL -336-SA5B-SB-4.0-5.0				
SL -337-SA5B-SB-3.0-4.0)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-321-SA5B-SB-3.0-4.0DUP	HEXAVALENT CHROMIUM	59	20.00	
(SL-021-SA5A-SS-0.0-0.5				
SL -022-SA5A-SS-0.0-0.5				
SL -035-SA5A-SS-0.0-0.5				
SL -036-SA5A-SS-0.0-0.5				
SL -037-SA5A-SS-0.0-0.5				
SL -040-SA5A-SS-0.0-0.5				No Qual
SL -050-SA5A-SS-0.0-0.5				OK by difference
SL -051-SA5A-SS-0.0-0.5				
SL -321-SA5B-SB-3.0-4.0				
SL -322-SA5B-SB-3.0-4.0				
SL -331-SA5B-SB-3.0-4.0				
SL -336-SA5B-SB-4.0-5.0				
SL -337-SA5B-SB-3.0-4.0)				

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_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
P10537AQ240255A (SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0)	2,4,6-TRINITROTOLUENE	121	-	80.00-120.00	-	2,4,6-TRINITROTOLUENE	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10547AY240525A (SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5 SL-051-SA5A-SS-0.0-0.5 SL-321-SA5B-SB-3.0-4.0 SL-322-SA5B-SB-3.0-4.0 SL-331-SA5B-SB-3.0-4.0 SL-336-SA5B-SB-4.0-5.0 SL-337-SA5B-SB-3.0-4.0)	Aroclor 5442	-	71	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10548AQ241631A (SL-051-SA5A-SS-0.0-0.5)	DINOSEB	7	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)
P10575AQ241916A (SL-021-SA5A-SS-0.0-0.5 SL-022-SA5A-SS-0.0-0.5 SL-035-SA5A-SS-0.0-0.5 SL-036-SA5A-SS-0.0-0.5 SL-037-SA5A-SS-0.0-0.5 SL-040-SA5A-SS-0.0-0.5 SL-050-SA5A-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCS1B77Y212045A (SL-331-SA5B-SB-3.0-4.0)	2-Chloro-1,1,1-trifluoroethane	-	124	78.00-120.00	-	2-Chloro-1,1,1-trifluoroethane	J(all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Surrogate Outlier Report

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-036-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J (all detects)
SL-040-SA5A-SS-0.0-0.5	DECACHLOROBIPHENYL	142	45.00-120.00	All Target Analytes	J(all detects)

Method: 8270C SIM
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-037-SA5A-SS-0.0-0.5	Nitrobenzene-d5	132	40.00-130.00	No Affected Compounds	No Qual One Out

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SB-3.0-4.0	N-NITROSODIMETHYLAMINE	J	21.2	35.9	PQL	ng/Kg	J (all detects)
SL-336-SA5B-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	24.7	38.1	PQL	ng/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	N-NITROSODIMETHYLAMINE	J	25.3	37.7	PQL	ng/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5A-SS-0.0-0.5	PERCHLORATE	J	13.8	32.9	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	SODIUM	J	80.8	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.65	11.1	PQL	mg/Kg	
	Zirconium	J	3.82	5.57	PQL	mg/Kg	
SL-022-SA5A-SS-0.0-0.5	SODIUM	J	96.9	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.76	10.8	PQL	mg/Kg	
	Zirconium	J	2.71	5.38	PQL	mg/Kg	
SL-035-SA5A-SS-0.0-0.5	SODIUM	J	91.6	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.46	10.4	PQL	mg/Kg	
	Zirconium	J	2.72	5.20	PQL	mg/Kg	
SL-036-SA5A-SS-0.0-0.5	SODIUM	J	89.1	109	PQL	mg/Kg	J (all detects)
	TIN	J	2.64	10.9	PQL	mg/Kg	
	Zirconium	J	3.54	5.43	PQL	mg/Kg	
SL-037-SA5A-SS-0.0-0.5	SODIUM	J	81.3	104	PQL	mg/Kg	J (all detects)
	TIN	J	2.54	10.4	PQL	mg/Kg	
	Zirconium	J	3.47	5.18	PQL	mg/Kg	
SL-040-SA5A-SS-0.0-0.5	SODIUM	J	78.8	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.68	10.6	PQL	mg/Kg	
	Zirconium	J	3.60	5.32	PQL	mg/Kg	
SL-050-SA5A-SS-0.0-0.5	SODIUM	J	81.1	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.8	PQL	mg/Kg	
	Zirconium	J	3.09	5.40	PQL	mg/Kg	
SL-051-SA5A-SS-0.0-0.5	SODIUM	J	90.0	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.8	PQL	mg/Kg	
	Zirconium	J	3.84	5.38	PQL	mg/Kg	
SL-321-SA5B-SB-3.0-4.0	TIN	J	4.03	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.02	5.53	PQL	mg/Kg	
SL-322-SA5B-SB-3.0-4.0	TIN	J	2.97	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.45	5.34	PQL	mg/Kg	
SL-331-SA5B-SB-3.0-4.0	TIN	J	2.55	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.33	PQL	mg/Kg	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-336-SA5B-SB-4.0-5.0	TIN	J	2.61	11.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.46	5.77	PQL	mg/Kg	
SL-337-SA5B-SB-3.0-4.0	TIN	J	2.90	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.25	5.60	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	ANTIMONY	J	0.207	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.149	0.437	PQL	mg/Kg	
	SILVER	J	0.0688	0.109	PQL	mg/Kg	
SL-022-SA5A-SS-0.0-0.5	ANTIMONY	J	0.149	0.211	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.107	0.108	PQL	mg/Kg	
	SELENIUM	J	0.127	0.422	PQL	mg/Kg	
SL-035-SA5A-SS-0.0-0.5	SELENIUM	J	0.131	0.420	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0723	0.105	PQL	mg/Kg	
SL-036-SA5A-SS-0.0-0.5	SELENIUM	J	0.124	0.435	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0837	0.109	PQL	mg/Kg	
SL-037-SA5A-SS-0.0-0.5	SELENIUM	J	0.116	0.426	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0828	0.107	PQL	mg/Kg	
SL-040-SA5A-SS-0.0-0.5	ANTIMONY	J	0.163	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.111	0.430	PQL	mg/Kg	
	SILVER	J	0.0487	0.107	PQL	mg/Kg	
SL-050-SA5A-SS-0.0-0.5	ANTIMONY	J	0.150	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.428	PQL	mg/Kg	
	SILVER	J	0.0559	0.107	PQL	mg/Kg	
SL-051-SA5A-SS-0.0-0.5	ANTIMONY	J	0.183	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.430	PQL	mg/Kg	
	SILVER	J	0.0712	0.108	PQL	mg/Kg	
SL-321-SA5B-SB-3.0-4.0	ANTIMONY	J	0.121	0.223	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0673	0.113	PQL	mg/Kg	
	SELENIUM	J	0.166	0.447	PQL	mg/Kg	
	SILVER	J	0.0549	0.112	PQL	mg/Kg	
SL-322-SA5B-SB-3.0-4.0	ANTIMONY	J	0.0858	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0752	0.419	PQL	mg/Kg	
	SILVER	J	0.0188	0.105	PQL	mg/Kg	
SL-331-SA5B-SB-3.0-4.0	ANTIMONY	J	0.123	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0887	0.105	PQL	mg/Kg	
	SELENIUM	J	0.139	0.431	PQL	mg/Kg	
	SILVER	J	0.0504	0.108	PQL	mg/Kg	
SL-336-SA5B-SB-4.0-5.0	ANTIMONY	J	0.140	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.166	0.444	PQL	mg/Kg	
	SILVER	J	0.0421	0.111	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-337-SA5B-SB-3.0-4.0	ANTIMONY	J	0.145	0.222	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.113	PQL	mg/Kg	
	SELENIUM	J	0.138	0.443	PQL	mg/Kg	
	SILVER	J	0.0585	0.111	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.1	PQL	mg/Kg	J (all detects)
SL-035-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.45	1.1	PQL	mg/Kg	J (all detects)
SL-036-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.54	1.1	PQL	mg/Kg	J (all detects)
SL-037-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-040-SA5A-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-321-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-331-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.49	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5A-SS-0.0-0.5	MERCURY	J	0.0113	0.107	PQL	mg/Kg	J (all detects)
SL-036-SA5A-SS-0.0-0.5	MERCURY	J	0.0080	0.107	PQL	mg/Kg	J (all detects)
SL-037-SA5A-SS-0.0-0.5	MERCURY	J	0.0117	0.104	PQL	mg/Kg	J (all detects)
SL-051-SA5A-SS-0.0-0.5	MERCURY	J	0.0067	0.105	PQL	mg/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-331-SA5B-SB-3.0-4.0	EFH (C30-C40)	J	0.48	1.3	PQL	mg/Kg	J (all detects)
SL-336-SA5B-SB-4.0-5.0	EFH (C8-C11)	J	0.71	1.4	PQL	mg/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	EFH (C21-C30)	J	0.94	1.4	PQL	mg/Kg	J (all detects)
	EFH (C8-C11)	J	0.58	1.4	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.11	0.38	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.11	0.38	PQL	ug/Kg	
SL-022-SA5A-SS-0.0-0.5	ENDRIN ALDEHYDE	J	0.073	0.37	PQL	ug/Kg	J (all detects)
	ENDRIN KETONE	J	0.11	0.37	PQL	ug/Kg	
SL-036-SA5A-SS-0.0-0.5	DIELDRIN	J	0.26	0.37	PQL	ug/Kg	J (all detects)
	HEPTACHLOR EPOXIDE	J	0.049	0.18	PQL	ug/Kg	
SL-037-SA5A-SS-0.0-0.5	ENDOSULFAN II	J	0.15	0.37	PQL	ug/Kg	J (all detects)
	ENDRIN ALDEHYDE	J	0.28	0.37	PQL	ug/Kg	
	HEPTACHLOR EPOXIDE	J	0.092	0.18	PQL	ug/Kg	
	MIREX	J	0.30	0.37	PQL	ug/Kg	
SL-040-SA5A-SS-0.0-0.5	ENDRIN KETONE	J	0.098	0.37	PQL	ug/Kg	J (all detects)
SL-050-SA5A-SS-0.0-0.5	4,4'-DDE	J	0.20	0.37	PQL	ug/Kg	J (all detects)
	4,4'-DDT	J	0.24	0.37	PQL	ug/Kg	
SL-051-SA5A-SS-0.0-0.5	4,4'-DDD	J	0.18	0.38	PQL	ug/Kg	J (all detects)
	4,4'-DDE	J	0.15	0.38	PQL	ug/Kg	
	4,4'-DDT	J	0.31	0.38	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.12	0.38	PQL	ug/Kg	
	ENDRIN KETONE	J	0.083	0.38	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	AROCLOR 1260	J	0.60	1.9	PQL	ug/Kg	J (all detects)
SL-022-SA5A-SS-0.0-0.5	AROCLOR 1260	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.3	3.6	PQL	ug/Kg	
SL-050-SA5A-SS-0.0-0.5	AROCLOR 1254	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.0	3.6	PQL	ug/Kg	
SL-051-SA5A-SS-0.0-0.5	AROCLOR 1254	J	0.99	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.2	1.9	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-021-SA5A-SS-0.0-0.5	DICAMBA	J	1.1	1.3	PQL	ug/Kg	J (all detects)
SL-022-SA5A-SS-0.0-0.5	DICAMBA	J	1.2	1.3	PQL	ug/Kg	J (all detects)
	MCPP	J	100	270	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-321-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	1.4	4.3	PQL	ug/Kg	J (all detects)
SL-322-SA5B-SB-3.0-4.0	ETHYLBENZENE	J	0.1	4.2	PQL	ug/Kg	
	m,p-Xylene	J	0.27	4.2	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.54	4.2	PQL	ug/Kg	
SL-331-SA5B-SB-3.0-4.0	BENZENE	J	0.18	4.6	PQL	ug/Kg	
	ETHYLBENZENE	J	0.17	4.6	PQL	ug/Kg	
	m,p-Xylene	J	0.56	4.6	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.80	4.6	PQL	ug/Kg	
	TOLUENE	J	0.14	4.6	PQL	ug/Kg	
SL-336-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.1	4.6	PQL	ug/Kg	
	m,p-Xylene	J	0.30	4.6	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	2.8	4.6	PQL	ug/Kg	
SL-337-SA5B-SB-3.0-4.0	CHLOROFORM	J	0.14	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	360	PQL	ug/Kg	J (all detects)
SL-036-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	360	PQL	ug/Kg	J (all detects)
SL-037-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	120	360	PQL	ug/Kg	J (all detects)
SL-050-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-051-SA5A-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	370	PQL	ug/Kg	J (all detects)
SL-322-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	360	PQL	ug/Kg	J (all detects)
SL-336-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-337-SA5B-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	380	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-035-SA5A-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.35	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.55	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.4	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.77	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE084 **Laboratory: LL**

EDD Filename: DE084_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-036-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.50	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.2	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.86	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.75	1.8	PQL	ug/Kg	
SL-037-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.56	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.5	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.99	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.81	1.8	PQL	ug/Kg	
SL-040-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.70	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.6	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.90	1.8	PQL	ug/Kg	
SL-051-SA5A-SS-0.0-0.5	ACENAPHTHYLENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-336-SA5B-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.76	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.66	1.9	PQL	ug/Kg	
SL-337-SA5B-SB-3.0-4.0	CHRYSENE	J	0.41	1.9	PQL	ug/Kg	J (all detects)

LDC #: 25764H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/14

SDG #: DE084 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: CR

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D(Al, Ba, Ca, Fe, Mg, Mn, Ti, Zn >4X)
VII.	Duplicate Sample Analysis	N	D (Sb, Se, Ag, <5xRL)
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-021-SA5A-SS-0.0-0.5	11	SL-331-SA5B-SB-3.0-4.0	21		31	
2	SL-022-SA5A-SS-0.0-0.5	12	SL-336-SA5B-SB-4.0-5.0	22		32	
3	SL-035-SA5A-SS-0.0-0.5	13	SL-337-SA5B-SB-3.0-4.0	23		33	
4	SL-036-SA5A-SS-0.0-0.5	14	(X) MS	24		34	
5	SL-037-SA5A-SS-0.0-0.5	15	MSD	25		35	
6	SL-040-SA5A-SS-0.0-0.5	16	DUP	26		36	
7	SL-050-SA5A-SS-0.0-0.5	17		27		37	
8	SL-051-SA5A-SS-0.0-0.5	18		28		38	
9	SL-321-SA5B-SB-3.0-4.0	19		29		39	
10	SL-322-SA5B-SB-3.0-4.0	20		30		40	

Notes: _____

LDC #: 25764H4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: OR
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 3-5 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1										
Cd			0.35	0.35	0.29										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 6-13 Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	6	7	8	9	11	12	13				
Cd			0.30	0.3	0.20	0.23	0.22	0.067	0.089	0.14	0.10				
Tl			0.10	0.1											

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.

SAMPLE DELIVERY GROUP

DE085

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
02-Feb-2011	TB-020211	6197645	TB	5030B	8260B	III
02-Feb-2011	TB-020211	6197645	TB	5030B	8260B SIM	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	3050B	6010B	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	3050B	6020	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	3060A	7199	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	3550B	8082	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	3550B	8270C	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	3550B	8270C SIM	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	5035	8260B	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	5035	8260B SIM	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	Gen Prep	9045M	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	METHOD	300.0	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	METHOD	314.0	III
02-Feb-2011	SL-275-SA5B-SB-3.5-4.5	6197644	N	METHOD	7471A	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	3050B	6010B	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	3050B	6020	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	3060A	7199	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	3550B	8082	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	3550B	8270C	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	3550B	8270C SIM	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	5035	8260B	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	5035	8260B SIM	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	Gen Prep	9045M	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	METHOD	300.0	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	METHOD	314.0	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0	6197642	N	METHOD	7471A	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0DUP	P197642D270753B	DUP	METHOD	300.0	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0DUP	P197642D272051B	DUP	METHOD	314.0	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0MS	P197642R270649B	MS	METHOD	314.0	III
02-Feb-2011	SL-173-SA5B-SB-2.0-3.0MS	P197642R270809B	MS	METHOD	300.0	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	3050B	6010B	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	3050B	6020	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	3060A	7199	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	3550B	8082	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	3550B	8270C	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	3550B	8270C SIM	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	5035	8260B	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	5035	8260B SIM	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	Gen Prep	9045M	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	METHOD	300.0	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	METHOD	314.0	III
02-Feb-2011	SL-209-SA5B-SB-4.0-5.0	6197643	N	METHOD	7471A	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	3050B	6010B	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	3050B	6020	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	3060A	7199	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	3550B	8082	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	3550B	8270C	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	3550B	8270C SIM	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	5035	8260B	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	5035	8260B SIM	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	Gen Prep	9045M	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	METHOD	300.0	III

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	METHOD	314.0	III
02-Feb-2011	SL-172-SA5B-SB-2.0-3.0	6197641	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-173-SA5B-SB-2.0-3.0 *Collected:* 2/2/2011 9:42:00 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-209-SA5B-SB-4.0-5.0 *Collected:* 2/2/2011 2:09:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.92	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-275-SA5B-SB-3.5-4.5 *Collected:* 2/2/2011 9:28:00 AM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-172-SA5B-SB-2.0-3.0 *Collected:* 2/2/2011 2:17:00 PM *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	10100		5.39	MDL	21.4	PQL	mg/Kg	J	A
CALCIUM	3030		6.57	MDL	21.4	PQL	mg/Kg	J	A
IRON	20900		5.05	MDL	21.4	PQL	mg/Kg	J	A
LITHIUM	24.9		0.24	MDL	2.1	PQL	mg/Kg	J	A
MAGNESIUM	4790		2.72	MDL	10.7	PQL	mg/Kg	J	A
MANGANESE	250		0.0836	MDL	0.536	PQL	mg/Kg	J	A
PHOSPHORUS	491		0.600	MDL	10.7	PQL	mg/Kg	J	A
POTASSIUM	2260		19.3	MDL	53.6	PQL	mg/Kg	J	Q, A
SODIUM	89.0	J	40.0	MDL	107	PQL	mg/Kg	J	Z
STRONTIUM	16.6		0.0664	MDL	0.536	PQL	mg/Kg	J	A
TIN	2.90	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
TITANIUM	1410		0.407	MDL	1.07	PQL	mg/Kg	J	A
Zirconium	3.49	J	0.900	MDL	5.36	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-173-SA5B-SB-2.0-3.0** ***Collected:*** **2/2/2011 9:42:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	12300		5.54	MDL	22.0	PQL	mg/Kg	J	A
CALCIUM	2780		6.75	MDL	22.0	PQL	mg/Kg	J	A
IRON	23800		5.19	MDL	22.0	PQL	mg/Kg	J	A
LITHIUM	36.6		0.24	MDL	2.2	PQL	mg/Kg	J	A
MAGNESIUM	5700		2.80	MDL	11.0	PQL	mg/Kg	J	A
MANGANESE	328		0.0859	MDL	0.551	PQL	mg/Kg	J	A
PHOSPHORUS	355		0.617	MDL	11.0	PQL	mg/Kg	J	A
POTASSIUM	2330		19.8	MDL	55.1	PQL	mg/Kg	J	Q, A
STRONTIUM	22.2		0.0683	MDL	0.551	PQL	mg/Kg	J	A
TIN	3.03	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
TITANIUM	1380		0.419	MDL	1.10	PQL	mg/Kg	J	A
Zirconium	1.80	J	0.925	MDL	5.51	PQL	mg/Kg	U	B

Sample ID: **SL-209-SA5B-SB-4.0-5.0** ***Collected:*** **2/2/2011 2:09:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	35900		26.7	MDL	114	PQL	mg/Kg	J	A

Sample ID: **SL-209-SA5B-SB-4.0-5.0** ***Collected:*** **2/2/2011 2:09:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	25500		5.71	MDL	22.7	PQL	mg/Kg	J	A
CALCIUM	3560		6.96	MDL	22.7	PQL	mg/Kg	J	A
LITHIUM	33.2		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	7040		2.88	MDL	11.4	PQL	mg/Kg	J	A
MANGANESE	307		0.0886	MDL	0.568	PQL	mg/Kg	J	A
PHOSPHORUS	363		0.636	MDL	11.4	PQL	mg/Kg	J	A
POTASSIUM	2620		20.4	MDL	56.8	PQL	mg/Kg	J	Q, A
SODIUM	110	J	42.4	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	26.6		0.0704	MDL	0.568	PQL	mg/Kg	J	A
TIN	3.23	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
TITANIUM	1580		0.431	MDL	1.14	PQL	mg/Kg	J	A
Zirconium	2.36	J	0.954	MDL	5.68	PQL	mg/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-275-SA5B-SB-3.5-4.5 ***Collected:*** 2/2/2011 9:28:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALUMINUM	20700		5.82	MDL	23.1	PQL	mg/Kg	J	A
CALCIUM	2160		7.09	MDL	23.1	PQL	mg/Kg	J	A
IRON	22100		5.45	MDL	23.1	PQL	mg/Kg	J	A
LITHIUM	26.0		0.25	MDL	2.3	PQL	mg/Kg	J	A
MAGNESIUM	4140		2.94	MDL	11.6	PQL	mg/Kg	J	A
MANGANESE	267		0.0903	MDL	0.579	PQL	mg/Kg	J	A
PHOSPHORUS	225		0.648	MDL	11.6	PQL	mg/Kg	J	A
POTASSIUM	1920		20.8	MDL	57.9	PQL	mg/Kg	J	Q, A
SODIUM	102	J	43.2	MDL	116	PQL	mg/Kg	J	Z
STRONTIUM	21.5		0.0718	MDL	0.579	PQL	mg/Kg	J	A
TIN	2.88	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
TITANIUM	1250		0.440	MDL	1.16	PQL	mg/Kg	J	A
Zirconium	2.82	J	0.972	MDL	5.79	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-172-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 2:17:00 PM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.163	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 2:17:00 PM ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0637	MDL	0.212	PQL	mg/Kg	J	Z, Q
CADMIUM	0.121		0.0424	MDL	0.106	PQL	mg/Kg	U	B
ZINC	56.5		0.594	MDL	3.18	PQL	mg/Kg	J	Q

Sample ID: SL-173-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 9:42:00 AM ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.108	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-173-SA5B-SB-2.0-3.0** ***Collected:*** **2/2/2011 9:42:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.108	J	0.0648	MDL	0.216	PQL	mg/Kg	J	Z, Q
CADMIUM	0.0866	J	0.0432	MDL	0.108	PQL	mg/Kg	U	B
ZINC	58.7		0.605	MDL	3.24	PQL	mg/Kg	J	Q

Sample ID: **SL-209-SA5B-SB-4.0-5.0** ***Collected:*** **2/2/2011 2:09:00 PM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.324	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: **SL-209-SA5B-SB-4.0-5.0** ***Collected:*** **2/2/2011 2:09:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.356		0.0662	MDL	0.221	PQL	mg/Kg	J	Q
CADMIUM	0.0872	J	0.0441	MDL	0.110	PQL	mg/Kg	U	B
SILVER	0.0170	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
ZINC	76.3		0.618	MDL	3.31	PQL	mg/Kg	J	Q

Sample ID: **SL-275-SA5B-SB-3.5-4.5** ***Collected:*** **2/2/2011 9:28:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0605	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: **SL-275-SA5B-SB-3.5-4.5** ***Collected:*** **2/2/2011 9:28:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0968	J	0.0674	MDL	0.225	PQL	mg/Kg	J	Z, Q
CADMIUM	0.119		0.0449	MDL	0.112	PQL	mg/Kg	U	B
SILVER	0.0390	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
ZINC	50.1		0.629	MDL	3.37	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-172-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 2:17:00 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	0.76	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-209-SA5B-SB-4.0-5.0 ***Collected:*** 2/2/2011 2:09:00 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	0.29	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-275-SA5B-SB-3.5-4.5 ***Collected:*** 2/2/2011 9:28:00 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	0.24	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-172-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 2:17:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0049	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 9:42:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0050	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-209-SA5B-SB-4.0-5.0 ***Collected:*** 2/2/2011 2:09:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0167	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SL-275-SA5B-SB-3.5-4.5 ***Collected:*** 2/2/2011 9:28:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0055	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-172-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 2:17:00 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	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: SL-173-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 9:42:00 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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: SL-209-SA5B-SB-4.0-5.0 ***Collected:*** 2/2/2011 2:09:00 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	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-275-SA5B-SB-3.5-4.5 ***Collected:*** 2/2/2011 9:28:00 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	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-172-SA5B-SB-2.0-3.0 ***Collected:*** 2/2/2011 2:17:00 PM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.29	J	0.06	MDL	4.3	PQL	ug/Kg	J	Z
m,p-Xylene	1.0	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.47	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-173-SA5B-SB-2.0-3.0** ***Collected:*** **2/2/2011 9:42:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **1.08**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.12	J	0.07	MDL	4.8	PQL	ug/Kg	J	Z
m,p-Xylene	0.45	J	0.20	MDL	4.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.48	J	0.29	MDL	4.8	PQL	ug/Kg	U	B

Sample ID: **SL-209-SA5B-SB-4.0-5.0** ***Collected:*** **2/2/2011 2:09:00 PM** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.25	J	0.07	MDL	4.3	PQL	ug/Kg	J	Z
m,p-Xylene	0.96	J	0.18	MDL	4.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.45	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: **SL-275-SA5B-SB-3.5-4.5** ***Collected:*** **2/2/2011 9:28:00 AM** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLBENZENE	0.14	J	0.06	MDL	3.9	PQL	ug/Kg	J	Z
m,p-Xylene	0.48	J	0.16	MDL	3.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.44	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: PrepDE085_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE085

Method Blank Outlier Report

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: DE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P03508BB221911	2/9/2011 7:11:00 PM	TIN	1.48 mg/Kg	SL-172-SA5B-SB-2.0-3.0 SL-173-SA5B-SB-2.0-3.0 SL-209-SA5B-SB-4.0-5.0 SL-275-SA5B-SB-3.5-4.5

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-172-SA5B-SB-2.0-3.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-173-SA5B-SB-2.0-3.0(RES)	TIN	3.03 mg/Kg	3.03U mg/Kg
SL-209-SA5B-SB-4.0-5.0(RES)	TIN	3.23 mg/Kg	3.23U mg/Kg
SL-275-SA5B-SB-3.5-4.5(RES)	TIN	2.88 mg/Kg	2.88U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB64B211500A	2/4/2011 3:00:00 PM	ACETONE METHYLENE CHLORIDE TOLUENE	7.5 ug/Kg 0.79 ug/Kg 0.53 ug/Kg	SL-172-SA5B-SB-2.0-3.0 SL-173-SA5B-SB-2.0-3.0 SL-209-SA5B-SB-4.0-5.0 SL-275-SA5B-SB-3.5-4.5

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-172-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.47 ug/Kg	4.3U ug/Kg
SL-173-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.48 ug/Kg	4.8U ug/Kg
SL-209-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.45 ug/Kg	4.3U ug/Kg
SL-275-SA5B-SB-3.5-4.5(RES)	METHYLENE CHLORIDE	0.44 ug/Kg	3.9U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: DE085_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-173-SA5B-SB-2.0-3.0MS (SL-173-SA5B-SB-2.0-3.0 SL-209-SA5B-SB-4.0-5.0 SL-275-SA5B-SB-3.5-4.5)	FLUORIDE	71	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: DE085_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
P10357AQ242235A (SL-172-SA5B-SB-2.0-3.0 SL -173-SA5B-SB-2.0-3.0 SL -209-SA5B-SB-4.0-5.0 SL -275-SA5B-SB-3.5-4.5)	AROCLOR 1260	268	-	65.00-137.00	-	AROCLOR 1242, 1248, 1254, 1260	J (all detects)
P10357AQ240548A **P10357AY240530A** (SL-172-SA5B-SB-2.0-3.0 SL -173-SA5B-SB-2.0-3.0 SL -209-SA5B-SB-4.0-5.0 SL -275-SA5B-SB-3.5-4.5)	Aroclor 5442	63	57	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: DE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SB-2.0-3.0	SODIUM	J	89.0	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	10.7	PQL	mg/Kg	
	Zirconium	J	3.49	5.36	PQL	mg/Kg	
SL-173-SA5B-SB-2.0-3.0	TIN	J	3.03	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.80	5.51	PQL	mg/Kg	
SL-209-SA5B-SB-4.0-5.0	SODIUM	J	110	114	PQL	mg/Kg	J (all detects)
	TIN	J	3.23	11.4	PQL	mg/Kg	
	Zirconium	J	2.36	5.68	PQL	mg/Kg	
SL-275-SA5B-SB-3.5-4.5	SODIUM	J	102	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.88	11.6	PQL	mg/Kg	
	Zirconium	J	2.82	5.79	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SB-2.0-3.0	ANTIMONY	J	0.128	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.163	0.424	PQL	mg/Kg	
SL-173-SA5B-SB-2.0-3.0	ANTIMONY	J	0.108	0.216	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0866	0.108	PQL	mg/Kg	
	SELENIUM	J	0.108	0.432	PQL	mg/Kg	
SL-209-SA5B-SB-4.0-5.0	CADMIUM	J	0.0872	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.324	0.441	PQL	mg/Kg	
	SILVER	J	0.0170	0.110	PQL	mg/Kg	
SL-275-SA5B-SB-3.5-4.5	ANTIMONY	J	0.0968	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0605	0.449	PQL	mg/Kg	
	SILVER	J	0.0390	0.112	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.76	1.1	PQL	mg/Kg	J (all detects)
SL-209-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.29	1.1	PQL	mg/Kg	J (all detects)
SL-275-SA5B-SB-3.5-4.5	HEXAVALENT CHROMIUM	J	0.24	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SB-2.0-3.0	MERCURY	J	0.0049	0.101	PQL	mg/Kg	J (all detects)
SL-173-SA5B-SB-2.0-3.0	MERCURY	J	0.0050	0.104	PQL	mg/Kg	J (all detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DE085 **Laboratory: LL**

EDD Filename: DE085_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-209-SA5B-SB-4.0-5.0	MERCURY	J	0.0167	0.110	PQL	mg/Kg	J (all detects)
SL-275-SA5B-SB-3.5-4.5	MERCURY	J	0.0055	0.111	PQL	mg/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SB-2.0-3.0	ETHYLBENZENE	J	0.29	4.3	PQL	ug/Kg	
	m,p-Xylene	J	1.0	4.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.47	4.3	PQL	ug/Kg	
SL-173-SA5B-SB-2.0-3.0	ETHYLBENZENE	J	0.12	4.8	PQL	ug/Kg	
	m,p-Xylene	J	0.45	4.8	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.48	4.8	PQL	ug/Kg	
SL-209-SA5B-SB-4.0-5.0	ETHYLBENZENE	J	0.25	4.3	PQL	ug/Kg	
	m,p-Xylene	J	0.96	4.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.45	4.3	PQL	ug/Kg	
SL-275-SA5B-SB-3.5-4.5	ETHYLBENZENE	J	0.14	3.9	PQL	ug/Kg	
	m,p-Xylene	J	0.48	3.9	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.44	3.9	PQL	ug/Kg	

LDC #: 257641 4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/6/14

SDG #: DE085 ADR Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: dc

2nd Reviewer: E

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	—	
III.	Calibration	—	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	SW	~~Client specified~~ See DE074
VII.	Duplicate Sample Analysis	N	J
VIII.	Laboratory Control Samples (LCS)	~~A~~	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	~~Not performed~~ See DE074
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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-172-SA5B-SB-2.0-3.0	11		21		31	
2	SL-173-SA5B-SB-2.0-3.0	12		22		32	
3	SL-209-SA5B-SB-4.0-5.0	13		23		33	
4	SL-275-SA5B-SB-3.5-4.5	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: _____

LDC #: 25764I4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Page: 1 of 1
Reviewer: CR
2nd Reviewer: A

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: 100x x MS: 2xdil
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Reason Code: B

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	4							
Cd			0.22	0.22	0.12	0.087	0.087	0.12							
Zr			7.1	3.55	3.5	1.8	2.4	2.8							

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.

SAMPLE DELIVERY GROUP

DE101

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-Mar-2011	TB-030911	6226877	TB	5030B	8015M	IV
09-Mar-2011	TB-030911	6226877	TB	5030B	8260B	IV
09-Mar-2011	TB-030911	6226877	TB	5030B	8260B SIM	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3050B	6010B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3050B	6020	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3060A	7199	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3546	1625C	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8015B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8015M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8082	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8270C	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	3550B	8270C SIM	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	5035	8015M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	5035	8260B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	5035	8260B SIM	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	8330	8330A	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	Gen Prep	9045M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	300.0	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	314.0	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	7471A	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	8015B	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	8015M	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	8315A	IV
09-Mar-2011	SL-225-SA5B-SB-2.0-3.0	6226876	N	METHOD	9012B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3050B	6010B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3050B	6020	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
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3060A	7199	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3546	1625C	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8015B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8015M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8082	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8270C	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	3550B	8270C SIM	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	5035	8015M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	5035	8260B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	5035	8260B SIM	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	8330	8330A	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	Gen Prep	9045M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	300.0	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	314.0	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	7471A	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	8015B	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	8015M	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	N	METHOD	8315A	IV
09-Mar-2011	SL-304-SA5B-SB-3.0-4.0	6226875	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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 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	4.6		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: **SL-304-SA5B-SB-3.0-4.0** ***Collected:*** **3/9/2011 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
FLUORIDE	3.3		0.92	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 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
BORON	6.35		1.00	MDL	5.62	PQL	mg/Kg	J	I
TIN	3.01	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.48	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z, I

Sample ID: **SL-304-SA5B-SB-3.0-4.0** ***Collected:*** **3/9/2011 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
BORON	7.65		0.987	MDL	5.55	PQL	mg/Kg	J	I
TIN	3.59	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.28	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z, I

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-225-SA5B-SB-2.0-3.0** ***Collected:*** **3/9/2011 9:20:00 AM** ***Analysis Type:*** **REA** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.186	J	0.0454	MDL	0.454	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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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
BARIUM	180		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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	0.133	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	7.28		0.0908	MDL	0.454	PQL	mg/Kg	J	E
CADMIUM	0.243		0.0454	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	12.3		0.0749	MDL	0.454	PQL	mg/Kg	J	A
LEAD	8.16		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A
NICKEL	21.4		0.113	MDL	0.454	PQL	mg/Kg	J	Q, A
SILVER	0.110	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.303		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
ZINC	75.1		0.635	MDL	3.40	PQL	mg/Kg	J	A

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	181		0.122	MDL	0.452	PQL	mg/Kg	J	E, A

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.196	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	15.4		0.0905	MDL	0.452	PQL	mg/Kg	J	E
CADMIUM	0.142		0.0452	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	25.3		0.0746	MDL	0.452	PQL	mg/Kg	J	A
LEAD	19.2		0.0118	MDL	0.226	PQL	mg/Kg	J	Q, A
NICKEL	39.5		0.113	MDL	0.452	PQL	mg/Kg	J	Q, A
THALLIUM	0.368		0.0339	MDL	0.113	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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	121		0.633	MDL	3.39	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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	0.36	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 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
HEXAVALENT CHROMIUM	0.51	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 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
MERCURY	0.0234	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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	27.4	J	19.3	MDL	38.6	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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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 (C21-C30)	0.73	J	0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B
EFH (C30-C40)	1.7		0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 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 (C21-C30)	1.0	J	0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B
EFH (C30-C40)	2.6		0.46	MDL	1.4	PQL	mg/Kg	UJ	L, B

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 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
Aroclor 5432	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

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

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 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
BENZO(A)PYRENE	0.84	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.48	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.77	MDL	1.9	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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 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
Di-n-octylphthalate	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: AQ**

Sample ID: TB-030911 ***Collected:*** 3/9/2011 8:00:00 AM ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
Chlorotrifluoroethylene	2	U	2	MDL	5	PQL	ug/L	UJ	C
DICHLORODIFLUOROMETHANE	2	U	2	MDL	5	PQL	ug/L	UJ	C

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-225-SA5B-SB-2.0-3.0 ***Collected:*** 3/9/2011 9:20:00 AM ***Analysis Type:*** RES ***Dilution:*** 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.7	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.38	U	0.38	MDL	7.7	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.32	U	0.32	MDL	3.9	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.84	J	0.23	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-304-SA5B-SB-3.0-4.0 ***Collected:*** 3/9/2011 12:30:00 ***Analysis Type:*** RES ***Dilution:*** 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.5	U	1.5	MDL	7.6	PQL	ug/Kg	UJ	C
4-METHYL-2-PENTANONE (MIBK)	0.37	U	0.37	MDL	7.6	PQL	ug/Kg	UJ	C
BROMOCHLOROMETHANE	0.31	U	0.31	MDL	3.8	PQL	ug/Kg	UJ	C
METHYLENE CHLORIDE	0.81	J	0.23	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: DE101 **Laboratory: LL**

EDD Filename: DE101_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
I	Interference Check Sample Analysis
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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* 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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery 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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

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

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DE101

Method Blank Outlier Report

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-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-225-SA5B-SB-2.0-3.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	TIN	3.59 mg/Kg	3.59U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-SB-3.0-4.0

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P73731AB320119A	3/16/2011 1:19:00 AM	EFH (C21-C30) EFH (C30-C40)	0.45 mg/Kg 1.3 mg/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-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-225-SA5B-SB-2.0-3.0(REA2)	EFH (C21-C30)	0.73 mg/Kg	1.4U mg/Kg
SL-225-SA5B-SB-2.0-3.0(REA2)	EFH (C30-C40)	1.7 mg/Kg	1.7U mg/Kg
SL-304-SA5B-SB-3.0-4.0(REA2)	EFH (C21-C30)	1.0 mg/Kg	1.4U mg/Kg
SL-304-SA5B-SB-3.0-4.0(REA2)	EFH (C30-C40)	2.6 mg/Kg	2.6U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB92B211246A	3/11/2011 12:46:00 PM	METHYLENE CHLORIDE	0.65 ug/Kg	SL-225-SA5B-SB-2.0-3.0 SL-304-SA5B-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-225-SA5B-SB-2.0-3.0(RES)	METHYLENE CHLORIDE	0.84 ug/Kg	3.9U ug/Kg
SL-304-SA5B-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	3.8U ug/Kg

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10731AQ320152A (SL-225-SA5B-SB-2.0-3.0 SL -304-SA5B-SB-3.0-4.0)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	115 119 126 116	- - - -	66.00-113.00 66.00-113.00 66.00-113.00 66.00-113.00	- - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J (all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10746AQ241933A P10746AY241915A (SL-225-SA5B-SB-2.0-3.0 SL -304-SA5B-SB-3.0-4.0)	Aroclor 5442	72	73	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) 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: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	N-NITROSODIMETHYLAMINE	J	27.4	38.6	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	TIN	J	3.01	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.62	PQL	mg/Kg	
SL-304-SA5B-SB-3.0-4.0	TIN	J	3.59	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.28	5.55	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	ANTIMONY	J	0.133	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.186	0.454	PQL	mg/Kg	
	SILVER	J	0.110	0.113	PQL	mg/Kg	
SL-304-SA5B-SB-3.0-4.0	ANTIMONY	J	0.196	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.452	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	HEXAVALENT CHROMIUM	J	0.36	1.2	PQL	mg/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	HEXAVALENT CHROMIUM	J	0.51	1.2	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-304-SA5B-SB-3.0-4.0	MERCURY	J	0.0234	0.110	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE101 **Laboratory: LL**

EDD Filename: DE101_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	EFH (C21-C30)	J	0.73	1.4	PQL	mg/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	EFH (C21-C30)	J	1.0	1.4	PQL	mg/Kg	J (all detects)

Method: 8260B
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	METHYLENE CHLORIDE	J	0.84	3.9	PQL	ug/Kg	J (all detects)
SL-304-SA5B-SB-3.0-4.0	METHYLENE CHLORIDE	J	0.81	3.8	PQL	ug/Kg	J (all detects)

Method: 8270C SIM
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-225-SA5B-SB-2.0-3.0	BENZO(A)PYRENE	J	0.84	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.48	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.9	PQL	ug/Kg	
SL-304-SA5B-SB-3.0-4.0	Di-n-octylphthalate	J	12	21	PQL	ug/Kg	J (all detects)

Enclosure II

EPA Level IV Validation Reports

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil/Water
Parameters:	Volatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0
TB-030911

Introduction

This data review covers 2 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 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.

N Presumptive evidence of presence of the constituent.

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/11/11	4-Methyl-2-pentanone	43	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	J (all detects) UJ (all non-detects)	A
	2-Hexanone	51	VBLKB92	J (all detects) UJ (all non-detects)	

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% for all compounds with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
3/1/11 (bm01v02)	Bromochloromethane	36	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 VBLKB92	J (all detects) UJ (all non-detects)	A
2/10/11 (yf10v20)	Dichlorodifluoromethane Acetone	30 28	TB-030911 VBLKY51	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
2/10/11 (yf10v31)	Chlorotrifluoroethene	32	TB-030911 VBLKY51	J (all detects) UJ (all non-detects)	A

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
VBLKB92	3/11/11	Methylene chloride	0.65 ug/Kg	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0

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-304-SA5B-SB-3.0-4.0	Methylene chloride	0.81 ug/Kg	3.8U ug/Kg
SL-225-SA5B-SB-2.0-3.0	Methylene chloride	0.84 ug/Kg	3.9U ug/Kg

Sample TB-030911 was identified as a trip blank. No volatile contaminants were found in this blank.

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

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) 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 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 DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Volatiles - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	4-Methyl-2-pentanone 2-Hexanone	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Bromochloromethane	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE101	TB-030911	Dichlorodifluoromethane Acetone Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 TB-030911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Volatiles - Laboratory Blank Data Qualification Summary - SDG DE101

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE101	SL-304-SA5B-SB-3.0-4.0	Methylene chloride	3.8U ug/Kg	A	B
DE101	SL-225-SA5B-SB-2.0-3.0	Methylene chloride	3.9U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C1a **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVG
2nd Reviewer:

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: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30% r
IV.	Continuing calibration/ICV	SW	CCV/ICV ≤ 25%
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client spec
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/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 3

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-304-SA5B-SB-3.0-4.0 S	11	VBLKB92	21		31		
2 SL-225-SA5B-SB-2.0-3.0	12	VBLKY51	22		32		
3 TB-030911 W	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 #: 25786 C1a

VALIDATION FINDINGS CHECKLIST

Reviewer: JW
2nd Reviewer: C

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) $\geq$ 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	lll. 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. Chlorotrifluoroethene
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 #: 25786 C1A

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: JM
2nd Reviewer: [signature]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?

Y N N/A Were percent differences (%D) and relative response factors (RRF) within method criteria for all CCC's and SPCC's ?

Y N N/A Were all %D and RRFs within the validation criteria of ≤25 %D and ≥0.05 RRF ?

#	Date	Standard ID	Compound	Finding %D (Limit: ≤25.0%)	Finding RRF (Limit: ≥0.05)	Associated Samples	Qualifications
	3/01/11	bm01v02 (ICV)	PP	36		1, 2, VBLKB92	J/UJ/A (C)
	2/10/11	yf10v20 (ICV)	JJ	30		3, VBLKY51	
			F	28			
	2/10/11	yf10v31 (ICV)	NNNN	32			
	3/11/11	bm11c01 (CCV)	Y	43		1, 2, VBLKB92	
			Z	51			

LDC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: VB
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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.

Blank analysis date: 3/11/11
Conc. units: ug/kg Associated Samples: 1, 2 Cmds: B

Compound	Blank ID	Sample Identification								
	VBlkB92	1	2							
Methylene chloride E	0.65	0.81 / 3.8U	0.84 / 3.9U							
Acetone										
CROI										

Blank analysis date:
Conc. units: Associated Samples:

Compound	Blank ID	Sample Identification								
Methylene chloride										
Acetone										
CROI										

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 #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

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

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	02/10/11	Acetone (FBZ)	0.0410	0.0410	0.0429	0.0429	14	14
	HP09953		Toluene (CBZ)	1.0041	1.0041	0.9969	0.9969	3	3
			1,1,2,2-TCA (DCB)	0.9767	0.9767	0.9569	0.9569	7	7

Cis/Cx	Ax	Ais
50/100	89674	1092991
50/50	801855	798571
50/50	469555	480763

Conc	Acetone	Toluene	1,1,2,2-TCA
4	0.0509	0.9810	0.9274
10	0.0498	1.0449	1.0560
20	0.0411	0.9670	0.9796
50	0.0410	1.0041	0.9767
100	0.0392	0.9917	0.9563
300	0.0352	0.9929	0.8454
S =	0.0429	0.9969	0.9569
X =	0.0062	0.0266	0.0693

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 #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

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

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 50 std)	Recalculated RRF (RRF 50 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/01/11	Methylene chloride (FBZ)	0.3130	0.3130	0.3108	0.3108	9	9
	HP09953		Toluene (CBZ)	0.8498	0.8498	0.8282	0.8282	7	7
			1,1,2,2-TCA (DCB)	0.6532	0.6532	0.6201	0.6201	8	8

Cis/Cx	Ax	Ais
50/50	386013	1233308
50/50	744690	876328
50/50	348637	533776

Conc	MeCl2	Toluene	1,1,2,2-TCA
4	0.3324	0.7056	0.5983
10	0.3397	0.8565	0.6441
20	0.3240	0.8626	0.6605
50	0.3130	0.8498	0.6532
100	0.2960	0.8430	0.6335
300	0.2596	0.8516	0.5312
S =	0.3108	0.8282	0.6201
X =	0.0294	0.0604	0.0487

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 # 35786 C1A

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound	(IS)	Average RRF (Initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported % D	Recalculated %D
1	bm11c01	3/11/11	Methylene chloride	(FBZ)	0.3108	0.3329	0.3329	7	7
	HP09953		Toluene	(CBZ)	0.8282	0.8396	0.8396	1	1
			1,1,2,2-TCA	(DCB)	0.6201	0.6949	0.6949	12	12
2	ym15c01	3/15/11	Acetone	(FBZ)	0.0429	0.0349	0.0349	19	19
	HP09953		Toluene	(CBZ)	0.9969	0.9799	0.9799	2	2
			1,1,2,2-TCA	(DCB)	0.9569	0.9412	0.9412	2	2

CCV1

Cis/Cx	Compound		Response cpd	Response IS
50/50	Methylene chloride	(FBZ)	371724	1116713
50/50	Toluene	(CBZ)	681059	811125
50/50	1,1,2,2-TCA	(DCB)	346480	498629

CCV2

Cis/Cx	Compound		Response cpd	Response IS
50/100	Acetone	(FBZ)	87554	1255591
50/50	Toluene	(CBZ)	907450	926042
50/50	1,1,2,2-TCA	(DCB)	523870	556600

LDC #: 25786 C1C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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
Toluene-d8	50	49.34	99	99	0
Bromofluorobenzene		47.41	95	95	
1,2-Dichloroethane-d4		50.32	101	101	
Dibromofluoromethane		49.64	99	99	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: 2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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 LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS 1D1897

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	20.0	20.0	22.78	22.1	114	114	111	111	3	3
Trichloroethene			20.23	20.05	101	101	100	100	1	1
Benzene			21.23	20.79	106	106	104	104	2	2
Toluene			20.3	19.8	101	101	99	99	2	2.5
Chlorobenzene			19.75	19.30	99	99	96	96.5	2	2

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.

DC #: 25786 C1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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?

$$\text{Concentration} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$$

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, MeCl ✓

Conc. = $\frac{(5517)(50.0)(5\,ml)}{(1039581)(0.3808)(6.11\,g)(0.867)}$

= 0.806

≈ 0.81 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: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0
TB-030911

Introduction

This data review covers 2 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 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.

N Presumptive evidence of presence of the constituent.

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-030911 was identified as a trip blank. No 1,4-dioxane was found in this blank.

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

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) 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 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 DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
1,4-Dioxane - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 TB-030911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
1,4-Dioxane - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C1b **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: NV
2nd Reviewer: [illegible]

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: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤30%
IV.	Continuing calibration/ICV	A	CCV/ICV ≤25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client spec.
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/CRQLs	A	
XIII.	Tentatively identified compounds (TICs)	N	
XIV.	System performance	A	
XV.	Overall assessment of data	A	
XVI.	Field duplicates	N	
XVII.	Field blanks	ND	TB = 3

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-304-SA5B-SB-3.0-4.0 S	11	VBLKE57	21		31	
2	SL-225-SA5B-SB-2.0-3.0	12	VBLKE55	22		32	
3	TB-030911 W	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 #: 25786 C1b

VALIDATION FINDINGS CHECKLIST

Reviewer: JW
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 $\geq$ 0.990?			✓	
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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.		✓		

LDC # 25786 C16

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/1/10	1,4-Dioxane (1,4-D-d8)	1.3193	1.3359	1.3219	1.3219	1	1
	HP15648								

Cis/Cx	Ax	Ax
10/10	29359	21977

Conc	RRF
0.5	1.3291
2.0	1.3004
5.0	1.3359
10.0	1.3193
25.0	1.3248
X =	1.3219
S =	0.0135

LDC # 25786 C1b

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 10 std)	Recalculated RRF (RRF 10 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/7/10	1,4-Dioxane (1,4-D-d8)	1.3392	1.3392	1.3396	1.3396	2	2
	HP15648								

Cis/Cx	Ax	Ax
10/10	25596	19113

Conc	RRF
0.5	1.3082
2.0	1.3793
5.0	1.3539
10.0	1.3392
25.0	1.3175
X =	1.3396
S =	0.0285

LDC #: 25786C1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: JVG
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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
Toluene-d8	10	9.496	95	95	0
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

Sample ID: _____

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Toluene-d8					
Bromofluorobenzene					
1,2-Dichloroethane-d4					
Dibromofluoromethane					

LDC #: 25786C1b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Reviewer: JVG
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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 = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboratry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS ID: LCS/D 57

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
1,4- Dioxane	125	125	135.79	130.19	109	109	104	104	4	4
~~1,1 Dichloroethene~~										
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.

SDC #: 25786C1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVG
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

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. _____, MB

Conc. = ( ) ( ) ( ) / ( ) ( ) ( ) ( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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.

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.

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 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 DE101	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
Semivolatiles - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C2a **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV6
2nd Reviewer: C

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: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30% r²
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
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/CRQLs	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-304-SA5B-SB-3.0-4.0	11	SBLKLA 074	21		31	
2	SL-225-SA5B-SB-2.0-3.0	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	

DC #: 25786 C2a

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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 $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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 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 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?	✓			

VALIDATION FINDINGS CHECKLIST

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/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.			✓	

LDC #: 25786C2a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C)

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 (IS)	Reported RRF (RRF 40 std)	Recalculated RRF (RRF 40 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/18/11	Phenol (IS1)	3.164	3.164	3.132	3.132	3	3
			2,4-Dichlorophenol (IS2)	0.334	0.334	0.325	0.325	4	4
	HP09572		2,4,5-Trichlorophenol (IS3)	0.425	0.425	0.415	0.415	6	6
			Pentachlorophenol (IS4)	0.140	0.140	0.133	0.133	10	10
			Benzidine (IS5)	0.971	0.971	0.900	0.900	6	6

Conc IS/Cpd	Area cpd	Area IS
40/50	948454	239817
40/50	429574	1028868
40/50	368237	693280
40/50	225994	1291520
40/150	5204665	1429812

Conc	Phenol	2,4-DCP	2,4,5-TCP	PCP	Benzidine
5	3.025	0.315	0.411	0.117	0.847
15	3.025	0.307	0.378	0.122	0.866
30	3.116	0.320	0.401	0.126	0.899
50	3.164	0.334	0.425	0.140	0.971
80	3.315	0.340	0.453	0.148	0.956
120	3.144	0.333	0.421	0.146	0.859
X =	3.132	0.325	0.415	0.133	0.900
S =	0.108	0.013	0.025	0.013	0.053

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 # 25786C2a

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ec1111	03/22/11	Phenol (IS1)	3.132	3.262	3.262	4	4
			2,4-Dichlorophenol (IS2)	0.325	0.336	0.336	3	3
	HP09572		2,4,5-Trichlorophenol (IS3)	0.415	0.432	0.432	4	4
			Pentachlorophenol (IS4)	0.133	0.143	0.143	7	7.5
			Benzidine (IS5)	0.900	0.942	0.942	5	5

CCV1

Compound (IS)	Cis/Cx	Ax	Ais
Phenol (IS1)	40/80	1323116	202784
2,4-Dichlorophenol (IS2)	40/80	630874	938630
2,4,5-Trichlorophenol (IS3)	40/80	547610	634444
Pentachlorophenol (IS4)	40/80	329643	1150918
Benzidine (IS5)	40/240	6683296	1182958

LDC #: 26786C2a

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JV
2nd reviewer: A

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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	66.51	67	67	0
2-Fluorobiphenyl	↓	77.03	77	77	↓
Terphenyl-d14	↓	85.20	85	85	↓
Phenol-d5	200	150.68	75	75	↓
2-Fluorophenol	↓	156.20	78	78	↓
2,4,6-Tribromophenol	↓	146.27	73	73	↓
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					

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JV6
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 074LA LCS

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	1666.67	NA	1546.5	NA	93	93				
N-Nitroso-di-n-propylamine			1422.08		85	85				
4-Chloro-3-methylphenol			1585.76		95	95				
Acenaphthene			1509.04		91	91				
Pentachlorophenol			1502.15		90	90				
Pyrene	✓	✓	1692.03		102	102				

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.

DC #: 25 786 C 2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: JVK
2nd reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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?

$$\text{Concentration} = \frac{(A_x)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_t)(\%S)}$$

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. _____ , MD

Conc. = ( )( )( )( )( )
( )( )( )( )( )

=

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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.

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.

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 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 DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Semivolatiles- Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Semivolatiles- Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles- Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C2b **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: SVG
2nd Reviewer:

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ SVOA (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: 3/09/11
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30% r²
IV.	Continuing calibration/ICV	A	CCV/ICV ≤ 25%
V.	Blanks	SVG SW A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	client spec.
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/CRQLs	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-304-SA5B-SB-3.0-4.0	11	SBLKLB0749	21		31	
2	SL-225-SA5B-SB-2.0-3.0	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	

VALIDATION FINDINGS CHECKLIST

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 $\geq$ 0.990?	✓			
Were all percent relative standard deviations (%RSD) $\leq$ 30% and relative response factors (RRF) $\geq$ 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 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 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?	✓			

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/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.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA SW 846 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.
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.

Notes:* = System performance check compound (SPCC) for RRF; ** = Calibration check compound (CCC) for %RSD.

LDC #: 25 786 C26

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

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 (IS)	Reported RRF (RRF 1.0 std)	Recalculated RRF (RRF 1.0 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	03/18/11	NDMA (IS1)	0.961	0.961	0.954	0.954	2	2
			Naphthalene (IS2)	1.013	1.013	1.036	1.036	6	6
	HP10976		Diethylphthalate (IS3)	1.114	1.114	1.170	1.170	9	9
			Phenanthrene (IS4)	1.093	1.093	1.130	1.130	8	8
			Chrysene (IS5)	1.143	1.143	1.166	1.166	6	6
			Benzo(a)pyrene (IS6)	1.342	1.342	1.349	1.349	11	11

Cis/Cx	Ax	Ais
1/1	84069	87467
1/1	343632	339282
1/1	230725	207135
1/1	371146	339484
1/1	404794	354001
1/1	356552	265697

Conc	NDMA	Naphthalene	Diethylphthalate	Phenanthrene	Chrysene	benzo(a)py
0.05	0.940	1.004	1.122	1.077	1.125	1.199
0.2	0.949	1.008	1.063	1.090	1.149	1.265
0.5	0.945	1.012	1.146	1.080	1.116	1.252
1	0.961	1.013	1.114	1.093	1.143	1.342
5	0.945	1.023	1.201	1.131	1.159	1.415
10	0.982	1.154	1.374	1.308	1.305	1.622
X =	0.9537	1.036	1.170	1.130	1.166	1.349
S =	0.016	0.058	0.110	0.089	0.070	0.154

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 # 25786 C26

VALIDATION FINDINGS WORSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS SVOA (EPA SW 846 Method 8270C-SIM)

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 = (Ax)(Cis)/(Ais)(Cx)

ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound,

Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	Average RRF (Initial)	Reported RRF (CCV)	Recalculated RRF (CCV)	Reported % D	Recalculated %D
1	ic0731	03/21/11	NDMA (IS1)	0.954	0.888	0.888	7	7
			Naphthalene (IS2)	1.036	1.008	1.008	3	3
	HP10976		Diethylphthalate (IS3)	1.170	1.182	1.182	1	1
			Phenanthrene (IS4)	1.130	1.074	1.074	5	5
			Chrysene (IS5)	1.166	1.131	1.131	3	3
			Benzo(a)pyrene (IS6)	1.349	1.372	1.372	2	2
2	ic0761c	03/22/11	NDMA (IS1)	0.954	0.941	0.941	1	1
			Naphthalene (IS2)	1.036	1.020	1.020	2	2
	HP10976		Diethylphthalate (IS3)	1.170	1.132	1.132	3	3
			Phenanthrene (IS4)	1.130	1.119	1.119	1	1
			Chrysene (IS5)	1.166	1.162	1.162	0	0
			Benzo(a)pyrene (IS6)	1.349	1.426	1.426	6	6

CV1		CCV1		CCV2	
Cis/Cx	Compound (IS)	Ax	Ais	Ax	Ais
1/1	NDMA (IS1)	61481	69258	518033	110155
1/1	Naphthalene (IS2)	270627	268373	2154258	422526
1/1	Diethylphthalate (IS3)	197889	167481	1410707	249186
1/1	Phenanthrene (IS4)	314728	292993	2312417	413165
1/1	Chrysene (IS5)	392338	346835	2860871	492553
1/1	Benzo(a)pyrene (IS6)	369048	268898	2761651	387316

LDC #: 25786 C26

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: SV
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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	0.891	~~85~~ 89	89	0
2-Fluorobiphenyl	↓	0.823	82	82	↓
Terphenyl-d14	↓	0.817	82	82	↓
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 #: [illegible]

VALIDATION FINDINGS WORKSHEET

Page: 1 of 1

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: MG

2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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 = I LCSC - LCSDC I * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 074 LB LCS

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	33.33	NA	30.46	NA	91	91				
Pentachlorophenol										
Pyrene	33.33		30.46		91	91				

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 #: 25786 C26

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: DK
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

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. #2, Benzo(a)pyrene

Conc. = $\frac{(11356)(1.00)(1\ ml)(1000)(\quad)}{(386194)(1.349)(30.0\ g)(0.864)(\quad)}$

= 0.84 ug/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC Report# 25786C2c

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

Introduction

This data review covers 2 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA 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.

N Presumptive evidence of presence of the constituent.

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 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% for N-Nitrosodimethylamine.

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 N-Nitrosodimethylamine.

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for N-Nitrosodimethylamine.

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.

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 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 DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C2c **VALIDATION COMPLETENESS WORKSHEET** Date: 7/12/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JV
2nd Reviewer: C

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	A	Sampling dates: 3/09 /11
II.	GC/MS Instrument performance check	N	Not reqd.
III.	Initial calibration	A	%RSD ≤ 30%
IV.	Continuing calibration/ICV	A	CCV ≤ 20% ICV ≤ 30%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Spec
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/CRQLs	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-304-SA5B-SB-3.0-4.0	11	SBLKLA 070	21		31	
2	SL-225-SA5B-SB-2.0-3.0	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	

DC #: 25786 C2C

VALIDATION FINDINGS CHECKLIST

Reviewer: JVR
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% 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. Surrogate spikes				
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?	✓			

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/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.			✓	

LDC # 25786 C2c

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

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 = (Ax)(Cis)/(Ais)(Cx)
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

Ax = Area of Compound
Cx = Concentration of compound
S= Standard deviation of the RRFs

Ais = Area of associated internal standard
Cis = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (IS)	Reported RRF (RRF 25 std)	Recalculated RRF (RRF 25 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/2011	NDMA (NDMA-d6)	1.0690	1.0693	1.2120	1.2120	16	16
	TE16311								

Cis/Cx	Ax	Ax
25/25	90106	84266

Conc	RRF
1.0	1.512
5.0	1.387
10.0	1.149
25.0	1.069
50.0	1.122
100.0	1.033
X =	1.2120
S =	0.1924

LDC # 25786C2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC/MS NDMA (EPA Method 1625C)

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 = (Ax)(Cis)/(Ais)(Cx)

Where:
ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
Ax = Area of compound
Cx = Concentration of compound,
Ais = Area of associated internal standard
Cis = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (IS)	CCV RRF	Reported RRF	Recalculated RRF	Reported % D	Recalculated %D
1	ac168	3/16/2011	NDMA (NDMA-d6)	1.2120	1.08759	1.08759	10	10
	TE16311							

	Compound (IS)	Cis/Cx	Ax	Ais
CCV1	NDMA (NDMA-d6)	25/25	87859	80783

LDC #: 45786 C2C

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: NG
2nd Reviewer:

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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 = Laboratory control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 670LA LCS

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~~ NDMA	533.33	NA	708.97	NA	85	85				
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 #: 25786C2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JV
2nd reviewer: C

METHOD: GC/MS ~~BNA~~ NDMA (EPA SW 846 Method ~~8270C~~ 1625C)

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 = $\frac{(A_x)(I_s)(V_i)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_t)(\%S)}$

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. #7, NDMA

Conc. = $\frac{(2853)(25)(1\text{ ml})(1000)(\quad)}{(82980)(1.212)(30.0\text{ g})(0.864)(\quad)}$

= 27.4 ng/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: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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
3/16/11	4C20069.29R	R1	Aroclor-5442	26.2	110740006A-BLK	Aroclor-5442	J (all detects) UJ (all non-detects)	A
3/16/11	4C20069.29R	R2	Aroclor-5442	32.2	110740006A-BLK	Aroclor-5442	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.

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.

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) 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
11074006A-LCS/D (All samples in SDG DE101)	Aroclor-5442	72 (75-125)	73 (75-125)	-	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-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 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 DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Aroclor-5442 Aroclor-5432 Aroclor-5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C3b **VALIDATION COMPLETENESS WORKSHEET** Date: 7-13-11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
2nd Reviewer: A

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: 3/9/11
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	%RSD≤20
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤20%
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	N	Client Specified
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 and reported CRQLs	A	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	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-304-SA5B-SB-3.0-4.0 S	11		21		31	1107/0006A-BLK
2	SL-225-SA5B-SB-2.0-3.0 S	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:

LDC #: 25786C3b
SDG #: See Cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 1
Reviewer: MS
2nd Reviewer: [illegible]

Method: Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/ECD Instrument performance check				
Was the instrument performance found to be acceptable?	✓			
III. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
Were the required standard concentrations analyzed in the initial calibration?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ~~%D or~~ ___%R				
Were Evaluation mix standards analyzed prior to the initial calibration and sample analysis?			✓	
Were endrin and 4,4'-DDT breakdowns ≤ 15% for individual breakdown in the Evaluation mix standards?			✓	
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20% or percent recovieries 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?	✓			
Were extract cleanup blanks analyzed with every batch requiring clean-up?	✓			
Was there contamination in the method blanks or clean-up 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) of one or more surrogates was 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				

LDC #: 25786C36
SDG #: See cover

VALIDATION FINDINGS CHECKLIST

Reviewer: KW
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
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?			✓	
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, dry weight factors, and clean-up activities 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. Chlordane
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH. Chlordane (Technical)
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II. Aroclor 5442
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ. 5432
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. 2,4'-DDD	KK. 5460
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. 2,4'-DDE	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE. 2,4'-DDT	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF. Hexachlorobenzene	NN.

Notes:_____

LDC #: 25786C35
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: KJ
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Please see qualifications below for all questions answered "N" Not applicable questions are identified as "N/A".

Y N N/A Were Evaluation mix standards run before initial calibration and before samples?

Y N N/A Were Endrin & 4,4'-DDT breakdowns acceptable in the Evaluation Mix standard (≤15.0% for individual breakdowns)?

Y N N/A Was at least one standard run daily to verify the working curve?

Y N N/A Did the continuing calibration standards meet the percent difference (%D) of ≤20.0%?

Level IV/D Only

Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Column	Compound	%D (Limit ≤ 20.0)	RT (Limits)	Associated Samples	Qualifications
	3/16/11	4C20069.29R	PL	II	26.2	( )	BLK	J/UJ/A (C)
			PK	II	32.2	( )		K
						( )		
						( )		
						( )		
						( )		
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A. alpha-BHC
B. beta-BHC
C. delta-BHC
D. gamma-BHC
E. Heptachlor
F. Aldrin
G. Heptachlor epoxide
H. Endosulfan I
I Dieldrin
J. 4,4'-DDE
K. Endrin
L Endosulfan II
M. 4,4'-DDD
N. Endosulfan sulfate
O. 4,4'-DDT
P. Methoxychlor
Q. Endrin ketone
R. Endrin aldehyde
S. alpha-Chlordane
T. gamma-Chlordane
U. Toxaphene
V. Aroclor-1016
W. Aroclor-1221
X. Aroclor-1232
Y. Aroclor-1242
Z. Aroclor-1248
AA. Aroclor-1254
BB. Aroclor-1260
CC. 2,4'-DDD
DD. 2,4'-DDE
EE. 2,4'-DDT
FF. Hexachlorobenzene
GG. Chlordane
HH Chlordane (Technical)

: #: 25786C55
3 #: -

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Reviewer: A
2nd Reviewer: ✓

THOD: ✓GC ___ HPLC

ase see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?
(N) N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

vel IV/D Only
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
	110740006A-LCS/D	II	72 (75-125)	73 (75-125)	( )	ALL	J/UJ/P (gml II-KK)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )	

LDC #: 25784C1b0
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated using the following calculations:

CF = A/C
Average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported CF (initial)	Recalculated CF (intial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/10/11	BB (R1 Peak1)	17	17	18	18	6.9	6.9
			JJ (R2 Peak1)	237	237	236	236	8.7	8.7
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 #: 25786C36
SDG #: See cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: M
2nd Reviewer: A

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount (ng)
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount (ng)

Standard ID	Calibration Date/Time	Compound	Average CF/ CCV Conc	Reported CF/Conc CCV	Recalculated CF/Conc CCV	Reported %D	Recalculated %D
4C20069.27R	3/16/11	BB (R_1)	200.00	183.04	183.04	8.5	8.5
		↓ (R_2)	200.00	179.02	179.02	10.5	10.5
4C20069.5R	3/17/11	BB (R_1)	200.00	189.22	189.22	5.4	5.4
		↓ (R_2)	200.00	186.70	186.70	6.7	6.7

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 #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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: 2

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene	A	1.04	0.769543	74	74	0
Tetrachloro-m-xylene						
Decachlorobiphenyl	A	1.04	0.963205	92	92	0
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Sample ID: _____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Tetrachloro-m-xylene						
Tetrachloro-m-xylene						
Decachlorobiphenyl						
Decachlorobiphenyl						

Notes: _____

LDC #: 25786C3b
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: VT
2nd Reviewer:

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration

RPD = | LCS - LCSD | * 2/(LCS + LCSD)

LCS = Laboratory control sample percent recovery

LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 1107400GA-LCS

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.
gamma-BHC										
4,4'-DDT										
Aroclor 1260	16.67	n/a	15.5	n/a	93	93				

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 #: 25786c36
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: M
2nd reviewer: C

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

X 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?

Example:

Sample I.D. ALL ALL :

Conc. = _____

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 13, 2011

Matrix: Soil

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 Methods 6010B, 6020, and 7000 for Metals. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Lithium, Magnesium, Manganese, Mercury, Molybdenum, 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.

N Presumptive evidence of presence of the constituent.

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)	Calcium Lead Phosphorus Tin Zinc	8.017 mg/Kg 0.011 mg/Kg 1.342 mg/Kg 1.444 mg/Kg 0.644 mg/Kg	All samples in SDG DE101
ICB/CCB	Copper Titanium	2.7 ug/L 1.1 ug/L	All samples in SDG DE101

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-304-SA5B-SB-3.0-4.0	Tin	3.6 mg/Kg	3.6U mg/Kg
SL-225-SA5B-SB-2.0-3.0	Tin	3.0 mg/Kg	3.0U mg/Kg

No field blanks were identified in this SDG.

V. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met with the following exceptions:

ICS ID	Date/ Time	Analyte	Concentration (Limits)	Associated Samples	Flag	A or P
ICSA	3/17/11 (19:02, 21:26)	Boron	23 ug/L (≤8.9)	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	J (all detects)	A
ICSA	3/17/11 (19:02, 21:26)	Zirconium	-13 ug/L (≤8.4)	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	J (all detects) UJ (all non-detects)	A

Samples were qualified as estimated (J/UJ) if the interferent concentrations in the samples were greater than ninety percent of the spiked interferent concentrations in the ICSA.

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-114-SA5A-SB-4.0-5.0MS/MSD (All samples in SDG DE101)	Antimony	50 (75-125)	45 (75-125)	-	J (all detects) UJ (all non-detects)	A
SL-114-SA5A-SB-4.0-5.0MS/MSD (All samples in SDG DE101)	Cadmium Lead Nickel Thallium	128 (75-125) 162 (75-125) 160 (75-125) 128 (75-125)	- - - -	- - - -	J (all detects) J (all detects) J (all detects) J (all detects)	A

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-114-SA5A-SB-4.0-5.0DUP (All samples in SDG DE101)	Arsenic	23 (≤20)	-	J (all detects) UJ (all non-detects)	A
	Barium	23 (≤20)	-	J (all detects) UJ (all non-detects)	

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) 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-114-SA5A-SB-4.0-5.0	Barium Copper Lead Nickel Zinc	14 (≤10) 27 (≤10) 15 (≤10) 17 (≤10) 20 (≤10)	All samples in SDG DE101	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All analytes reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE101

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Boron	J (all detects)	A	ICP interference check sample analysis (concentration) (I)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Zirconium	J (all detects) UJ (all non-detects)	A	ICP interference check sample analysis (concentration) (I)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Cadmium Lead Nickel Thallium	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Arsenic Barium	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Barium Copper Lead Nickel Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	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 DE101

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE101	SL-304-SA5B-SB-3.0-4.0	Tin	3.6U mg/Kg	A	B
DE101	SL-225-SA5B-SB-2.0-3.0	Tin	3.0U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-11-11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MG
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	A	Sampling dates: 3-9-11
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/MSD (SDG: DE102)
VII.	Duplicate Sample Analysis	SW	DUP ↓
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	not utilized
XI.	ICP Serial Dilution	SW	
XII.	Sample Result Verification	A	
XIII.	Overall Assessment of Data	A	
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: all soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	
2	SL-225-SA5B-SB-2.0-3.0	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	PBS	30		40	

Notes: _____

DC #: 25786C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: V

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?	✓			

LDC #: J5786C4

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
2nd Reviewer: W

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 #: 25786C4
SDG #: —

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: MG
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1, 2	S	(Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B) Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, ___
1, 2	S	Nb, Pd, (P,) Pt, (Sn, Sr, Ti,) W, U, (Li,) S, (Zr,) ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___
		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Li, S, Zr, ___

Analysis Method		
ICP	S	(Li) S, (Al, B, Ca, Fe, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr)
ICP-MS	↓	Al, (Sb, As, Ba, Be, Cd) Ca, (Cr, Co, Cu) Fe, (Pb) Mg, Mn, (Ni) K, (Se, Ag) Na, (Tl, V, Zn, Mo) B, Si, ___
ICP-MS		Nb, Pd, P, Pt, Sn, Sr, Ti, W, U, Zr, ___
GFAA		Al, Sb, As, Ba, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Hg, Ni, K, Se, Ag, Na, Tl, V, Zn, Mo, B, Si, CN, ___

Comments: (Mercury by CVAA if performed)
Nb: Niobium, Pd: Palladium, P: Phosphorus, Pt: Platinum, S: Sulfur, W: Tungsten, U: Uranium, Zr: Zirconium

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: MG
2nd Reviewer:

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000)
Soil preparation factor applied: 100x; ICP-MS 2x dil
Sample Concentration units, unless otherwise noted: mg/kg
Associated Samples: all

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2								
Ca	8.017			40.085										
Cu			2.7	2.7										
Pb	0.011			0.055										
P	1.342			6.71										
Ti			1.1	0.55										
Sn	1.444			7.22	3.6	3.0								
Zn	0.644			3.22										

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 #: 25786C4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: MG
2nd Reviewer: LA

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	ICSA (≤ MDL) (µg/L) Finding		Associated Samples	Qualifications
1	3-17-11	ICSA (19:02, 21:26)	B	23	(8.9)	1	J dets / A (I)
		↓	Li	6	(2.2)	↓	No Qual
			Mn	4	(0.78)		↓
			P	16	(5.6)		
			Sr	3	(0.62)		
		↓	Zr	-13	(8.4)	↓	J / UJ / A (I)
2	3-17-11	ICSA (19:02, 21:26)	B	23	(8.9)	2	J dets / A (I)
		↓	Li	6	(2.2)	↓	No Qual
			Mn	4	(0.78)		↓
			P	16	(5.6)		
			Sr	3	(0.62)		
		↓	Zr	-13	(8.4)	↓	J / UJ / A (I)

Comments: Fe > 90% ICSA

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: MG
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 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	Soil Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
1	SL-114-SA5A-S	B-4.0-5.0	Sb	50 (75-125)	45 (75-125)		all	J/UJ/A (Q)
	MS/MSD	↓	Cd	128 ( )			↓	J dets/A
	↓	↓	Pb	162 ( )				↓
			Ni	160 ( )				
			Tl	128 (↓)				

Comments:

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: MG
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 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	Soil Matrix	Analyte	RPD (Limits)	Difference (Limits)	Associated Samples	Qualifications
1		SL-114-SA5A-SB-4	0-5.0	As	23 (≤ 20)		all	J / UJ / A (E)
		DUP ↓	↓	Ba	23 (↓)		↓	↓ ↓

Comments:

DUP.4SW

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Reviewer: MG
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 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 (soil)	Analyte	%D (Limits)	Associated Samples	Qualifications
1		SL-114-SA5A-SB-	4.0-5.0	Ba	14 (≤10)	all	J/UJ/A (A)
		↓	↓	Cu	27 ( )	↓	↓ ↓
				Pb	15 ( )		
				Ni	17 ( )		
		↓	↓	Zn	20 ( )	↓	

Comments:

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Reviewer: MG
2nd Reviewer: [illegible]

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 x 100 / True

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)
1851 ICV	ICP (Initial calibration)	Fe	31366.83	30000.0	104.6	104.6	Y
2128 ICV	ICP/MS (Initial calibration)	Be	53.65	50.0	107.3	107.3	
0502 ICV	CVAA (Initial calibration)	Hg	2.47	2.5	98.8	98.8	
1959 CCV2	ICP (Continuing calibration)	Sn	492.37	500.0	98.5	98.5	
2221 CCV2	ICP/MS (Continuing calibration)	Tl	25.41	25.0	101.6	101.6	
0534 CCV3	CVAA (Continuing calibration)	Hg	1.05	1.0	105.0	105.0	
	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 #: 25786C4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: MG
2nd Reviewer:

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	Cd	19.77 (µg/L)	20 (µg/L)	98.8	99.0	Y
LCS	Laboratory control sample	Ag	49.38 (mg/kg)	46.2 (mg/kg)	107	107	
-114-SA5A-SB-4.0-5.0 MS	Matrix spike	Sb	(SSR-SR) 0.78 (mg/kg)	1.55 (mg/kg)	50	50	
-114-SA5A-SB-4.0-5.0 DUP	Duplicate	As	9.31 (mg/kg)	7.38 (mg/kg)	23	23	
-114-SA5A-SB-4.0-5.0	ICP serial dilution	Zn	326.40 (µg/L)	261.05 (µg/L)	20	20	

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 #: 25786C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 2
Reviewer: MG
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 # 1, 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:

$$\frac{(262.66216\ mg/L)(0.100\ L)}{(0.00104\ kg)(0.867)} = 29130.3\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1	Al	29100	29100	Y
		Sb	0.20	0.20	
		As	15.4	15.4	
		Ba	181	181	
		Be	1.8	1.8	
		B	7.7	7.7	
		Cd	0.14	0.14	
		Ca	5590	5590	
		Cr	43.7	43.7	
		Co	16.4	16.4	
		Cu	25.3	25.3	
		Fe	38700	38700	
		Pb	19.2	19.2	
		Li	53.2	53.2	
		Mg	8930	8930	
		Mn	441	441	
		Hg	0.023	0.023	
		Mo	0.62	0.62	
		Ni	39.5	39.5	
		P	173	173	

Note:

LDC #: 25786C4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: MG
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 #1, Tl 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:

$$\frac{(1.62900\ \mu g/L)(0.100\ L)(2)}{(1.02\ g)(0.867)} = 0.3684\ \mu g/g \text{ or } mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1 cont'd.	K	2140	2140	Y
		Se	0.14	0.14	
		Ag	0.21	0.21	
		Na	470	470	
		Sr	40.6	40.6	
		Tl	0.37	0.37	
		Sn	3.6	3.6	
		Ti	1380	1380	
		V	79.7	79.7	
		Zn	121	121	
		Zr	1.3	1.3	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory, Area IV: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 9012B for Cyanide, EPA Method 300.0 for Nitrate and Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA SW 846 Method 9045C for pH, 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 Laboratory, Area IV 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.

N Presumptive evidence of presence of the constituent.

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

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.

No field blanks were identified in this SDG.

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-114-SA5A-SB-4.0-5.0MS (All samples in SDG DE101)	Fluoride	72 (80-120)	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) and 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 DE101	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE101

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike analysis (%R) (Q)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	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 DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C6

SDG #: DE101

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

9M4.

Date: 7-11-11

Page: 1 of 1

Reviewer: MG

2nd Reviewer: V

METHOD: (Analyte) Cyanide (EPA SW846 Method 9012B), Nitrate-N, Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), ~~Oxidation Reduction Potential (ASTM D1498)~~, pH (~~EPA Method 150.1~~/EPA SW846 Method 9045C) 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	A	Sampling dates: 3-9-11
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	SW	MS (SDG: DE102)
V	Duplicates	A	DUP (↓)
VI.	Laboratory control samples	A	LCS
VII.	Sample result verification	A	
VIII.	Overall assessment of data	A	
IX.	Field duplicates	N	
X.	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: all soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	
2	SL-225-SA5B-SB-2.0-3.0	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	PBS	30		40	

Notes:

LDC #: 25786C6

VALIDATION FINDINGS CHECKLIST

Reviewer: MG
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 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% (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 #: 25786C6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Reviewer: MG
2nd reviewer:

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1, 2	S	(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 _____ _____
		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 _____ _____

Comments: _____

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Page: 1 of 1
Reviewer: MG
2nd Reviewer: V

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 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 (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	Soil Matrix	Analyte	%R	Associated Samples	Qualifications
1		SL-114-SA5A-SB-4 MS	.0-5.0	F	72 (80-120)	all	J/UJ/A

Comments:

LDC #: 25786C6

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: MG
2nd Reviewer:

METHOD: Inorganics, Method see cover

The correlation coefficient (r) for the calibration of F was recalculated. Calibration date: 3-17-11

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

%R = Found x 100 / True

Where, Found = concentration of each analyte measured in the analysis of the ICV or CCV solution
True = concentration of each analyte in the ICV or CCV source

Type of Analysis	Analyte	Standard ID	Conc Found (units)	Area True (units)	Recalculated r or %R	Reported r or %R	Acceptable (Y/N)
Initial calibration	F	Blank	0.0 (mg/L)	0	r^2 = 0.998403	r^2 = 0.998704	Y
		Standard 1	0.1 ( )	0.014			
		Standard 2	0.4 ( )	0.057			
		Standard 3	1.0 ( )	0.167			
		Standard 4	2.0 ( )	0.342			
		Standard 5	3.0 ( )	0.543			
		Standard 6	-	-			
		Standard 7	-	-			
Calibration verification	NO_3-N	1643 CCV	1.491 (mg/L)	1.5 (mg/L)	99	99	
Calibration verification	CN	1530 CCV	0.1567 (mg/L)	0.15 (mg/L)	104	104	
Calibration verification	Cr VI	1151 CCV	201.09 (µg/L)	200 (µg/L)	101	101	

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 #: 25786C6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: MG
2nd Reviewer:

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)
1709 LCS	Laboratory control sample	ClO_4	560.29 (mg/kg)	500 (mg/kg)	112	not reported	Y
L-114-SA5A-SB-4.0-5.0 MS	Matrix spike sample	F	(SSR-SR) 7.3 (mg/kg)	10.18 (mg/kg)	72	72	
L-114-SA5A-SB-4.0-5.0 DUP	Duplicate sample	NO_3-N	1.7 (mg/kg)	1.5 (mg/kg)	12	13	

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 #: 25786C6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: MG
2nd reviewer: V

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 #1, NO_3-N reported with a positive detect were recalculated and verified using the following equation:

Concentration =

$Y = mx + b$
where $m = 0.2859$
$b = -0.0192$

Recalculation:

$0.031 = 0.2859(x) - 0.0192$

$0.176\ mg/L = x$

then $\frac{(0.176\ mg/L)(0.050\ L)}{(0.00492\ kg)(0.867)} = 2.063\ mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
1	1	F	3.3	3.3	Y
		NO_3-N	2.1	2.1	↓
		Cr VI	0.51	0.51	
		pH	7.87 (pH unit)	7.87 (pH unit)	↓

Note: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil/Water
Parameters:	Total Petroleum Hydrocarbons as Gasoline
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0
TB-030911

Introduction

This data review covers 2 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.

N Presumptive evidence of presence of the constituent.

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-030911 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

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

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.

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 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 DE101	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
Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0 TB-030911	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C7 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-12-11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: KM
2nd Reviewer: C

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: 3/9/11
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	N	client specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	ND	TB=3

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-304-SA5B-SB-3.0-4.0 S	11		21		31	110730304A-BLK	S
2	SL-225-SA5B-SB-2.0-3.0 S	12		22		32	110750420A-BLK	W
3	TB-030911 W	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:

LDC #: 20148C4

VALIDATION FINDINGS CHECKLIST

Reviewer: LM
2nd Reviewer: [illegible]

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
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) of one or more surrogates was 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?	✓			
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				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: VT
2nd Reviewer:

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (118 std)	Recalculated CF (118 std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	5/14/10	GRO	7676	7676	8050	8050	5.2	5.2
	ICAL	11/29/10	GRO	39008	39008	37329	37329	127	127
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: WF
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	20075002	3/16/11	GRO	550.00	619.19	619.19	12.6	12.6
	34073B0002	3/14/11	GRO	220.00	195.34	195.34	11.2	11.2
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.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: C

METHOD: X 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: 3

Surrogate	Detector Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
TFT	FID	30	19.568	65.2	65.2	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #:

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1107 3A34A-LCS

Compound	Spike Added (MG/KG)		Spike 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	n/a	7.9	n/a	72	72				
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 #: 25786C7

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: KF
2nd Reviewer:

METHOD: X 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. ALL Compound Name GRO

Concentration = ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments:

LDC Report# 25786C8

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: Total Petroleum Hydrocarbons as Extractables

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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
110730021A-BLK	3/16/11	C21-C30 C30-C40	0.45 mg/Kg 1.3 mg/Kg	All samples in SDG DE101

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-304-SA5B-SB-3.0-4.0	C21-C30 C30-C40	1.0 mg/Kg 2.6 mg/Kg	1.38U mg/Kg 2.6U mg/Kg
SL-225-SA5B-SB-2.0-3.0	C21-C30 C30-C40	0.73 mg/Kg 1.7 mg/Kg	1.38U mg/Kg 1.7U 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

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.

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
110730021A-LCS	C12-C14 C15-C20 C21-C30 C30-C40	115 (66-113) 119 (66-113) 126 (66-113) 116 (66-113)	All samples in SDG DE101	J (all detects) J (all detects) J (all detects) J (all detects)	P

VIII. Target Compound Identification

All target compound identifications were within validation criteria.

IX. 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 DE101	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
Total Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	C12-C14 C15-C20 C21-C30 C30-C40	J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DE101	SL-304-SA5B-SB-3.0-4.0	C21-C30 C30-C40	1.38U mg/Kg 2.6U mg/Kg	A	B
DE101	SL-225-SA5B-SB-2.0-3.0	C21-C30 C30-C40	1.38U mg/Kg 1.7U mg/Kg	A	B

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C8
SDG #: DE101
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 7-12-11
Page: 1 of 1
Reviewer: LA
2nd Reviewer: C

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: 3/9/11
II	Initial calibration	A	0/0RSD ≤ 20
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	SW	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	SW	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: ALL SOIL

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	110730021A-BLK
2	SL-225-SA5B-SB-2.0-3.0	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	

Notes:

LDC #: 23786

VALIDATION FINDINGS CHECKLIST

Reviewer: LW
2nd Reviewer: A

Method: X 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ~~%D~~ or ____ %R				
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25706C5

VALIDATION FINDINGS CHECKLIST

Reviewer: JM
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25786C8
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: MT
2nd Reviewer: A

METHOD: X 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.

11 B 11

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?

Blank extraction date: / **Blank analysis date:** ~~3/19/11~~ 3/16/11 **Associated samples:** ALL
Conc. units: mg/kg

Compound	Blank ID	Sample Identification						
		1	2					
C21-C30	0.45	1.0/1.38U	0.73/1.38U					
C30-C40	1.3	2.6/U	1.7/U					

Blank extraction date: _____ **Blank analysis date:** _____ **Associated samples:** _____
Conc. units: _____

Compound	Blank ID	Sample Identification						

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".

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
	1107300 2/A-LCS	C12-C14	115 (66-113)	( )	( )	ALL	J det (L)
		C15-C20	119 ( )	( )	( )		
		C21-C30	126 ( )	( )	( )		
		C30-C40	116 ( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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	3/11/11	C8-C40	16811	16811	16752	16752	1.4	1.4
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: WA
2nd Reviewer:

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	J073.62R	3/15/11	C8-C40	575.96	615.38	615.38	6.8	6.8
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.

Surrogate Results Verification

Reviewer: LA
2nd reviewer: A

METHOD: X 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	Detector/ Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Chlorobenzene	FID	1.00	.8015	80	80	0
o-Terphenyl	FID	1.00	1.066	107	107	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #: 27[illegible]

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: MA
2nd Reviewer: A

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS/LCSD samples: 1107300Z1A-LCS

Compound	Spike Added (mg/kg)		Spike 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~~ C8-C40 (8015)	.84	n/a	.8	n/a	95	95				
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 #: 257868

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: A

METHOD: X 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 = $\frac{(2288706)(1mL)}{(16752)(60.1g)(.867)}$

= 2.6 mg/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

LDC Report# 25786C40

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: Explosives

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 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 DE101	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
Explosives - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Explosives - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C40 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-12-11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: MM
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: 3/9/11
II	Initial calibration	A	r/%RSD ≤ 20, r²
III.	Calibration verification/ICV	A	ICV/CCV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS/D
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
XIII.	Field blanks	N	

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

Validated Samples: ALL SOIL

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	1107/0003A-BLK
2	SL-225-SA5B-SB-2.0-3.0	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	

Notes:

LDC #: 43 10801C

VALIDATION FINDINGS CHECKLIST

Reviewer: MF
2nd Reviewer: 2

Method: ____ GC __X__ 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?	✓			
Did the initial calibration meet the curve fit acceptance criteria?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC _____ HPLC X

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (600.6 std)	Recalculated CF (600.6 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/8/11	RDX (clA)	86.4	86.4	95.2	95.2	16.1	16.1
			2,4,6-TNT ↓	195	195	197	197	0.8	0.8
2			(ClB) for confirmation only						
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: AT
2nd Reviewer: A

METHOD: GC _____ HPLC X

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	25120679.06R	3/15/11	RDX (CCA)	493.50	456.84	456.84	7.4	7.4
			2,4,6-TNT ↓	500.50	500.41	500.41	0	0
2	25120679.18R	3/16/11	RDX (CCA)	987.00	919.70	919.70	6.8	6.8
			2,4,6-TNT ↓	1001.00	1010.61	1010.61	1.0	1.0
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.

Surrogate Results Verification

Reviewer: MT
2nd reviewer: C

METHOD: __ GC X 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	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
2-NMX	A	1923.43	2135.01	111	111	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: RT
2nd Reviewer: CA

METHOD: ___ GC X HPLC

The percent recoveries (%R) and relative percent differences (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 =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 110710003A-LCS

Compound	Spike Added (ug/kg)		Spike 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)	2000.25	n/a	2048.55	n/a	102	102				
2,4,6-Trinitrotoluene (8330)	1999.2	n/a	2304.23	n/a	115	115				

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 #: 25786C4O

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: MV
2nd Reviewer:

METHOD: __ GC X HPLC

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. ALL Compound Name ALL

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:	March 9, 2011
LDC Report Date:	July 14, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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 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.

VI. 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.

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 CRQLs

All compound quantitation and CRQLs were within validation criteria.

The QAPP reporting limits (RL) were met with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG DE101	o-Terphenyl m-Terphenyl p-Terphenyl	Laboratory reporting limit reported at 3.5 mg/Kg.	Reporting limit should be reported at 0.167 mg/Kg per the QAPP.	None None None	P

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE101	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 DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	o-Terphenyl m-Terphenyl p-Terphenyl	None None None	P	Compound quantitation and CRQLs (*IX)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Terphenyls - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C41 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-13-11
SDG #: DE101 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: 3/29/11
II	Initial calibration	A	%RSD ≤ 20 %
III.	Calibration verification ~~/ICV~~	A	CCV ≤ 20 %
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A SW	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: ALL SOIL

1 FB	SL-304-SA5B-SB-3.0-4.0	11		21		31	110730020A-BLK
2 FB	SL-225-SA5B-SB-2.0-3.0	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	

Notes: _____

LDC #: 45700-11

VALIDATION FINDINGS CHECKLIST

Reviewer: MT
2nd Reviewer: A

Method: A 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 25466G1

VALIDATION FINDINGS CHECKLIST

Reviewer: M
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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.			✓	

SDG #: See cover

Compound Quantitation and Reported CRQLs

Reviewer: M
2nd Reviewer: A

METHOD: X **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

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
	ALL	lab RL's higher than QAPP.	ALL	TEXT (Z)
		QAPP = 0.167 mg/kg		
		Lab = 3.5 mg/kg		

Comments: See sample calculation verification worksheet for recalculations

LDC #: [illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: GC X HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (17.7_{std})	Recalculated CF (17.7_{std})	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	O-Terphenyl	2.59 E4	2.59 E4	2.54 E4	2.57 E4	2.1	2.1
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: MT
2nd Reviewer:

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	R073.53R	3/16/11	O-Terphenyl	35.48	35.18	35.18	0.9	0.9
	R073.64R	3/16/11	O-Terphenyl	35.48	35.40	35.40	0.2	0.2
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.

DC #:_____ VALIDATION FINDINGS WORKSHEET Page: 1 of 1

Surrogate Results Verification

Reviewer: AH
2nd reviewer: A

METHOD: X 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	Detector/ Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
n-Tricontane	FID	0.333	0.255163	77	77	0

Sample ID:_____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:_____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:_____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:_____

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:_____

LDC #: ____

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: AL
2nd Reviewer: C

METHOD: X GC __ HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1107300204-LCS

Compound	Spike Added (mg/kg)		Spike 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)										
O-Terphenyl	1.67	n/a	1.61	n/a	96	96				

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 #: 25786C41

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: X GC ___ HPLC

X N N/A Were all reported results recalculated and verified for all level IV samples?
X 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. ALL Compound Name ALL

Concentration = _____

MD

#	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: March 9, 2011

LDC Report Date: July 13, 2011

Matrix: Soil

Parameters: Alcohols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 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 DE101	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
Alcohols - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Alcohols - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C43 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JW
2nd Reviewer: A

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: 3/09/11
II	Initial calibration	A	%RSD ≤ 20%
III.	Calibration verification/ICV	A	CAL/ICV ≤ 20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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-304-SA5B-SB-3.0-4.0	11	PBLK26075	21		31	
2	SL-225-SA5B-SB-2.0-3.0	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	

Notes:

LDC #: 25786 C43

VALIDATION FINDINGS CHECKLIST

Reviewer: JVC
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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R	✓			
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) of one or more surrogates was 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?	✓			
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				

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25786 CF3

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: GC _____ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: A = Area of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (CF 5000 std)	Recalculated (CF 5000 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/4/2011	Methanol	6.070	6.071	6.110	6.110	6.1	6.1
	H2739B								

C	A
5000	30354

Conc	Methanol
1000	6.500
2500	6.480
5000	6.070
10000	5.790
2.37	5.710
X=	6.110
S=	0.372

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 #25786C43

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC_____HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0003	3/16/2011	Methanol	2500	2382.57	2382.82	4.7	4.7
	H2739B							

CCV1

Compound	Area	CF
Methanol	14559	6.110

LDC #: 25786 C43

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
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	
Acetone	SP-1000	250	232.25	90	96	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 #: 25766 C4y

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: [signature]

METHOD: /GC __HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS/LCSD samples: LCS 26075

Compound	Spike Added (ug/kg)		Spike Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ Mogt (8015)	2500	NA	2277.61	NA	91	91				
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 #: 25786C43

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer: C

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 MB

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 13, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 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 DE101	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
Glycols - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Glycols - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C45 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/11/11
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: JVC
2nd Reviewer:

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: 3/09/11
II	Initial calibration	A	%RSD ≤20%
III.	Calibration verification/ICV	A	CCV/ICV ≤20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Spec
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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-~~314~~ 304 -SA5B-~~SB-0.0-0.5~~ SB-3.0-4.0	11	PBLK07073	21		31	
2	SL-~~316~~ 225 -SA5B-SB-~~4.5-5.5~~ 2.0-3.0	12		22		32	
3	~~SL-328-SA5B-SB-3.5-4.5~~	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:

LDC #: 25786 C45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ___ %R	✓			
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) of one or more surrogates was 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?	✓			
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				

LDC #: 25786 C45

VALIDATION FINDINGS CHECKLIST

Reviewer: JVG
2nd Reviewer: C

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25786C 4F

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC _____

The calibration factors (CF), average CF, and relative standard deviation (%RSD) were recalculated for compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

Where: H = Height of compound
C = Concentration of compound
S = Standard deviation of calibration factors
X = Mean of calibration factors

#	Standard ID	Calibration Date	Compound	Reported (211.111 std)	Recalculated (211.111 std)	Reported Average RRF (Initial)	Recalculated Average RRF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/2011	Ethylene glycol	176.6665	176.6667	184.8493	184.8493	10.7	10.7
	H6612A								

C	H
211.111	37296.28

Conc	Ethylene glycol
10.556	181.1939
52.778	160.0332
105.556	192.6461
211.111	176.6665
316.667	179.3655
527.778	219.1904
X=	184.8493
S=	19.831

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 # 25786C48

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: JVG
2nd Reviewer:

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration percent difference (%D) values were recalculated for the compounds identified below using the following calculation:

Percent difference (%D) = 100 * (N - C)/N

Where: N = Initial Calibration Factor or Nominal Amount
C = Calibration Factor from Continuing Calibration Standard or Calculated Amount

#	Standard ID	Calibration Date	Compound	CCV Conc	Reported Conc	Recalculated Conc	Reported % D	Recalculated %D
1	0023	3/16/2011	Ethylene glycol	105.56	120.77	120.77	14.4	14.4

	Compound	Height	CF
CCV1	Ethylene glycol	22324	184.85

LDC #: 25786C45

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: JVG
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: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetramethylene glycol	Col. A	196.86	121.88	62 ✓	62 ✓	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 #: 25786C45

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: JVG
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (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

Where SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD =(({SSCLCS - SSCLCSD} * 2) / (SSCLCS + SSCLCSD))*100

LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: LCS07073

Compound	Spike Added (mg/kg)		Spike Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
~~Gasoline~~ Gasoline (8015)	205.03	NA	173.25	NA	85	84.5				
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 #: 25786C45

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: JVG
2nd Reviewer:

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 ND

Concentration =_____

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALCnew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: March 9, 2011

LDC Report Date: July 14, 2011

Matrix: Soil

Parameters: Formaldehyde

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE101

Sample Identification

SL-304-SA5B-SB-3.0-4.0
SL-225-SA5B-SB-2.0-3.0

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 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.

N Presumptive evidence of presence of the constituent.

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

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.

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 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 DE101	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
Formaldehyde - Data Qualification Summary - SDG DE101

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE101	SL-304-SA5B-SB-3.0-4.0 SL-225-SA5B-SB-2.0-3.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Formaldehyde - Laboratory Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE101

No Sample Data Qualified in this SDG

LDC #: 25786C71 **VALIDATION COMPLETENESS WORKSHEET** Date: 7-12-4
SDG #: DE101 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 3/9/4
II	Initial calibration	A	%RSD≤20
III.	Calibration verification/~~ICV~~	A	CCV≤20%
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	Client Specified
VII.	Laboratory control samples	A	LCS
VIII.	Target compound identification	A	
IX.	Compound Quantitation and CRQLs	A	
X.	System Performance	A	
XI.	Overall assessment of data	A	
XII.	Field duplicates	N	
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: All soil

1	SL-304-SA5B-SB-3.0-4.0	11		21		31	1107300084-TBLK
2	SL-225-SA5B-SB-2.0-3.0	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	

Notes:

LDC #: 25T0011

VALIDATION FINDINGS CHECKLIST

Reviewer: lut
2nd Reviewer: [illegible]

Method: ____ GC __X__ 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?	✓			
Was a linear fit used for evaluation? If yes, were all percent relative standard deviations (%RSD) < 20%?	✓			
Was a curve fit used for evaluation? If Yes, what was the acceptance criteria used?		✓		
Did the initial calibration meet the curve fit acceptance criteria?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
What type of continuing calibration calculation was performed? ✓ %D or ____ %R				
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) of one or more surrogates was 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?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
X. Regional Quality Assurance and Quality Control				

LDC #: 25786A7

VALIDATION FINDINGS CHECKLIST

Reviewer: JA
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Were performance evaluation (PE) samples performed?		✓		
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 6[illegible]
SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: VA
2nd Reviewer: C

METHOD: GC_____HPLC X

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the followin 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 (2nd std)	Recalculated CF (2nd std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	3/16/11	Formaldehyde	61.5	61.5	59.8	59.8	4.0	4.0
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.

SDG #: See Cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC _____ HPLC X

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified belo 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	IF4075.20R	3/16/11	Formaldehyde	199000	1956.33	1956.33	1.7	1.7
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.

Surrogate Results Verification

Reviewer: [illegible]
2nd reviewer: [illegible]

METHOD: ___ GC _X_ 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: 2

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Butyraldehyde	A	3948.53	3869.57	98	98	0

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Sample ID:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference

Notes:

LDC #: _____

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: MA
2nd Reviewer: _____

METHOD: ___ GC X HPLC

The percent recoveries (%R) and relative percent differences (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 =(((SSCLCS - SSCLCSD) * 2) / (SSCLCS + SSCLCSD))*100

Where SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory Control Sample
SC = Sample concentration
LCSD = Laboratory Control Sample duplicate

LCS/LCSD samples: 1107300 08A- LCS

Compound	Spike Added (ug/kg)		Spike 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	n/a	4996.35	n/a	96	96				

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 #: 25786C74

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: TM
2nd Reviewer: C

METHOD: ___ GC X HPLC

X 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. ALL Compound Name Formaldehyde

Concentration = _____

MD

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPLE DELIVERY GROUP

DE102

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-Mar-2011	TB-031111	6228986	TB	5030B	8015M	III
11-Mar-2011	TB-031111	6228986	TB	5030B	8260B	III
11-Mar-2011	TB-031111	6228986	TB	5030B	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8270C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	3550B	8270C SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	Gen Prep	9045M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0	6228978	N	METHOD	9012B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	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
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8270C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	3550B	8270C SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	6228979	MS	METHOD	9012B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	3550B	8270C	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	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
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	6228980	MSD	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	Gen Prep	9045M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0DUP	6228981	DUP	METHOD	9012B	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MSD	P228978M320217A	MSD	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-4.0-5.0MS	P228978R320152A	MS	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3050B	6010B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3050B	6020	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3060A	7199	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3546	1625C	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8015B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8082	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	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
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	3550B	8270C SIM	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	5035	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	5035	8260B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	5035	8260B SIM	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	8330	8330A	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	Gen Prep	9045M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	300.0	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	314.0	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	7471A	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	8015B	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	8015M	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	8315A	III
11-Mar-2011	SL-114-SA5A-SB-9.0-10.0	6228982	N	METHOD	9012B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3050B	6010B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3050B	6020	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3060A	7199	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3546	1625C	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8015B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8015M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8082	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8270C	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	3550B	8270C SIM	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	5035	8015M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	5035	8260B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	5035	8260B SIM	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	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
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	Gen Prep	9045M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	300.0	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	314.0	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	7471A	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	8015B	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	8015M	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	8315A	III
11-Mar-2011	DUP09-SA5A-QC-031111	6228975	FD	METHOD	9012B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3050B	6010B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3050B	6020	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3060A	7199	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3546	1625C	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8015B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8015M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8082	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8270C	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	3550B	8270C SIM	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	5035	8015M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	5035	8260B	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	5035	8260B SIM	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	8330	8330A	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	Gen Prep	9045M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	300.0	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	314.0	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	7471A	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	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
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	8015M	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	8315A	III
11-Mar-2011	SL-112-SA5A-SB-8.5-9.5	6228976	N	METHOD	9012B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3050B	6010B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3050B	6020	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3060A	7199	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3546	1625C	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8015B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8015M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8082	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8270C	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	3550B	8270C SIM	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	5035	8015M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	5035	8260B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	5035	8260B SIM	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	8330	8330A	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	Gen Prep	9045M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	300.0	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	314.0	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	7471A	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	8015B	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	8015M	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	8315A	III
11-Mar-2011	SL-112-SA5A-SB-14.0-15.0	6228977	N	METHOD	9012B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3050B	6010B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	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
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3060A	7199	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3546	1625C	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8015B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8015M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8082	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8270C	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	3550B	8270C SIM	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	5035	8015M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	5035	8260B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	5035	8260B SIM	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	8330	8330A	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	Gen Prep	9045M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	300.0	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	314.0	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	7471A	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	8015B	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	8015M	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	8315A	III
11-Mar-2011	SL-227-SA5B-SB-2.5-3.5	6228985	N	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3050B	6010B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3050B	6020	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3060A	7199	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3546	1625C	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8015B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8015M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	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
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8270C	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	3550B	8270C SIM	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	5035	8015M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	5035	8260B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	5035	8260B SIM	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	8330	8330A	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	Gen Prep	9045M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	300.0	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	314.0	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	7471A	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	8015B	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	8015M	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	8315A	III
11-Mar-2011	SL-113-SA5A-SB-9.0-10.0	6228983	N	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3050B	6010B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3050B	6020	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3060A	7199	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3546	1625C	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8015B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8015M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8082	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8270C	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	3550B	8270C SIM	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	5035	8015M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	5035	8260B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	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*

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	8330	8330A	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	Gen Prep	9045M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	300.0	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	314.0	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	7471A	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	8015B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	8015M	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	8315A	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15	6228984	N	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15DUP	P228984D271627A	DUP	METHOD	9012B	III
11-Mar-2011	SL-113-SA5A-SB-14.0-15MS	P228984R271631A	MS	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: DE102 Laboratory: LL

EDD Filename: DE102_v1. eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 Matrix: SO

Sample ID: DUP09-SA5A-QC-031111 Collected: 3/11/2011 8:58:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.2		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-112-SA5A-SB-14.0-15.0 Collected: 3/11/2011 12:16:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-112-SA5A-SB-8.5-9.5 Collected: 3/11/2011 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
FLUORIDE	2.6		0.89	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-113-SA5A-SB-14.0-15 Collected: 3/11/2011 3:39:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.6		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-113-SA5A-SB-9.0-10.0 Collected: 3/11/2011 3:29:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.8		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-114-SA5A-SB-4.0-5.0 Collected: 3/11/2011 8:34:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	6.6		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-114-SA5A-SB-9.0-10.0 Collected: 3/11/2011 8:43:00 Analysis Type: RES Dilution: 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	5.9		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-227-SA5B-SB-2.5-3.5 Collected: 3/11/2011 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	5.6		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: DE102 **Laboratory:** LL

EDD Filename: DE102_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP09-SA5A-QC-031111 ***Collected:*** 3/11/2011 8:58:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	18500		7.30	MDL	23.8	PQL	mg/Kg	J	FD
TIN	3.01	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	5.35	J	1.00	MDL	5.96	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5A-SB-14.0-15.0 ***Collected:*** 3/11/2011 12:16:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.47	J	0.974	MDL	5.47	PQL	mg/Kg	J	Z
TIN	2.63	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-112-SA5A-SB-8.5-9.5 ***Collected:*** 3/11/2011 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
BORON	4.79	J	0.977	MDL	5.49	PQL	mg/Kg	J	Z
TIN	2.79	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.74	J	0.922	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5A-SB-14.0-15 ***Collected:*** 3/11/2011 3:39:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	2.77	J	0.942	MDL	5.29	PQL	mg/Kg	J	Z
TIN	2.09	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-113-SA5A-SB-9.0-10.0 ***Collected:*** 3/11/2011 3:29:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.17	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z
TIN	2.57	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	0.941	J	0.938	MDL	5.58	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	35900		7.64	MDL	24.9	PQL	mg/Kg	J	FD
TIN	3.11	J	1.25	MDL	12.5	PQL	mg/Kg	U	B
Zirconium	5.57	J	1.05	MDL	6.23	PQL	mg/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.95	J	1.23	MDL	12.3	PQL	mg/Kg	U	B
Zirconium	5.48	J	1.03	MDL	6.13	PQL	mg/Kg	J	Z

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 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
BORON	5.19	J	0.985	MDL	5.54	PQL	mg/Kg	J	Z
TIN	2.90	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.06	J	0.930	MDL	5.54	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0481	MDL	0.481	PQL	mg/Kg	J	Z

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.130	MDL	0.481	PQL	mg/Kg	J	E, A

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.227	J	0.0722	MDL	0.241	PQL	mg/Kg	J	Z, Q
ARSENIC	8.98		0.0962	MDL	0.481	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.383		0.0481	MDL	0.120	PQL	mg/Kg	J	Q
COPPER	17.7		0.0794	MDL	0.481	PQL	mg/Kg	J	A
LEAD	13.2		0.0125	MDL	0.241	PQL	mg/Kg	J	Q, A
NICKEL	29.7		0.120	MDL	0.481	PQL	mg/Kg	J	Q, A
SILVER	0.0505	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
THALLIUM	0.441		0.0361	MDL	0.120	PQL	mg/Kg	J	Q
ZINC	89.9		0.674	MDL	3.61	PQL	mg/Kg	J	A

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **REA** ***Dilution:*** **5**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	209		1.56	MDL	8.37	PQL	mg/Kg	J	A

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	87.3		0.121	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0670	U	0.0670	MDL	0.223	PQL	mg/Kg	UJ	Q
ARSENIC	3.88		0.0893	MDL	0.446	PQL	mg/Kg	J	E
CADMIUM	0.0949	J	0.0446	MDL	0.112	PQL	mg/Kg	J	Z, Q
COPPER	9.73		0.0737	MDL	0.446	PQL	mg/Kg	J	A
LEAD	4.25		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
NICKEL	9.27		0.112	MDL	0.446	PQL	mg/Kg	J	Q, A
SILVER	0.0247	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.253		0.0335	MDL	0.112	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0998	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	115		0.115	MDL	0.426	PQL	mg/Kg	J	E, A

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0640	U	0.0640	MDL	0.213	PQL	mg/Kg	UJ	Q
ARSENIC	4.94		0.0853	MDL	0.426	PQL	mg/Kg	J	E
CADMIUM	0.119		0.0426	MDL	0.107	PQL	mg/Kg	J	Q
COPPER	8.04		0.0704	MDL	0.426	PQL	mg/Kg	J	A
LEAD	5.56		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	12.5		0.107	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0245	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
THALLIUM	0.294		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
ZINC	74.1		0.597	MDL	3.20	PQL	mg/Kg	J	A

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **REA** ***Dilution:*** **20**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	1100		5.93	MDL	31.8	PQL	mg/Kg	J	A

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.114	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0635	U	0.0635	MDL	0.212	PQL	mg/Kg	UJ	Q
ARSENIC	3.22		0.0847	MDL	0.424	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.171		0.0424	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	17.9		0.0699	MDL	0.424	PQL	mg/Kg	J	A
LEAD	3.63		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
NICKEL	7.84		0.106	MDL	0.424	PQL	mg/Kg	J	Q, A
SILVER	0.0263	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
THALLIUM	0.225		0.0318	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0866	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	69.8		0.122	MDL	0.451	PQL	mg/Kg	J	E, A

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0676	U	0.0676	MDL	0.225	PQL	mg/Kg	UJ	Q
ARSENIC	4.09		0.0902	MDL	0.451	PQL	mg/Kg	J	E
CADMIUM	0.138		0.0451	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	6.37		0.0744	MDL	0.451	PQL	mg/Kg	J	A
LEAD	4.50		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
NICKEL	9.69		0.113	MDL	0.451	PQL	mg/Kg	J	Q, A
SILVER	0.0199	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z
THALLIUM	0.250		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
ZINC	58.9		0.631	MDL	3.38	PQL	mg/Kg	J	A

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0503	MDL	0.503	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	152		0.136	MDL	0.503	PQL	mg/Kg	J	E, A

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.290		0.0755	MDL	0.252	PQL	mg/Kg	J	Q
ARSENIC	9.31		0.101	MDL	0.503	PQL	mg/Kg	J	E
CADMIUM	0.445		0.0503	MDL	0.126	PQL	mg/Kg	J	Q
COPPER	17.7		0.0830	MDL	0.503	PQL	mg/Kg	J	A
LEAD	13.3		0.0131	MDL	0.252	PQL	mg/Kg	J	Q, A
NICKEL	27.7		0.126	MDL	0.503	PQL	mg/Kg	J	Q, A
SILVER	0.0781	J	0.0151	MDL	0.126	PQL	mg/Kg	J	Z
THALLIUM	0.419		0.0377	MDL	0.126	PQL	mg/Kg	J	Q
ZINC	82.1		0.704	MDL	3.77	PQL	mg/Kg	J	A

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.134	J	0.0495	MDL	0.495	PQL	mg/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.134	MDL	0.495	PQL	mg/Kg	J	E, A

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.187	J	0.0743	MDL	0.248	PQL	mg/Kg	J	Z, Q
ARSENIC	7.53		0.0990	MDL	0.495	PQL	mg/Kg	J	E
CADMIUM	0.336		0.0495	MDL	0.124	PQL	mg/Kg	J	Q
COPPER	15.4		0.0817	MDL	0.495	PQL	mg/Kg	J	A
LEAD	11.3		0.0129	MDL	0.248	PQL	mg/Kg	J	Q, A
NICKEL	24.4		0.124	MDL	0.495	PQL	mg/Kg	J	Q, A
SILVER	0.0375	J	0.0149	MDL	0.124	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.310		0.0371	MDL	0.124	PQL	mg/Kg	J	Q
ZINC	69.5		0.693	MDL	3.71	PQL	mg/Kg	J	A

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.145	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 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
BARIUM	140		0.121	MDL	0.447	PQL	mg/Kg	J	E, A

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 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
ANTIMONY	0.0901	J	0.0671	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	7.07		0.0894	MDL	0.447	PQL	mg/Kg	J	E
CADMIUM	0.161		0.0447	MDL	0.112	PQL	mg/Kg	J	Q
COPPER	12.1		0.0738	MDL	0.447	PQL	mg/Kg	J	A
LEAD	17.7		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	20.9		0.112	MDL	0.447	PQL	mg/Kg	J	Q, A
SILVER	0.0645	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z
THALLIUM	0.335		0.0335	MDL	0.112	PQL	mg/Kg	J	Q
ZINC	67.8		0.626	MDL	3.35	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.29	J	0.24	MDL	1.2	PQL	mg/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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: SL-112-SA5A-SB-8.5-9.5 *Collected:* 3/11/2011 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
HEXAVALENT CHROMIUM	0.23	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5A-SB-4.0-5.0 *Collected:* 3/11/2011 8:34:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.26	U	0.26	MDL	1.3	PQL	mg/Kg	UJ	FD

Sample ID: SL-227-SA5B-SB-2.5-3.5 *Collected:* 3/11/2011 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	0.65	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: DUP09-SA5A-QC-031111 *Collected:* 3/11/2011 8:58:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0083	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5A-SB-14.0-15.0 *Collected:* 3/11/2011 12:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0162	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

Sample ID: SL-112-SA5A-SB-8.5-9.5 *Collected:* 3/11/2011 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
MERCURY	0.0093	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-113-SA5A-SB-14.0-15 *Collected:* 3/11/2011 3:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0337	J	0.0030	MDL	0.105	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0091	J	0.0036	MDL	0.125	PQL	mg/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0079	J	0.0034	MDL	0.119	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***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	216	U	216	MDL	432	PQL	ng/Kg	UJ	Q

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***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	351	J	211	MDL	421	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***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)	0.48	U	0.48	MDL	1.4	PQL	mg/Kg	UJ	FD
EFH (C21-C30)	1.0	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z, L, FD
EFH (C30-C40)	2.9		0.48	MDL	1.4	PQL	mg/Kg	J	L, FD

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***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)	1.5		0.45	MDL	1.4	PQL	mg/Kg	J	L
EFH (C30-C40)	3.1		0.45	MDL	1.4	PQL	mg/Kg	J	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***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)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z, L
EFH (C30-C40)	5.3		0.44	MDL	1.3	PQL	mg/Kg	J	L

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***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)	5.5		0.45	MDL	1.4	PQL	mg/Kg	J	L
EFH (C30-C40)	19		0.45	MDL	1.4	PQL	mg/Kg	J	L

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **REA** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	6.5	U	6.5	MDL	16	PQL	mg/Kg	UJ	Q

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***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)	2.0		0.52	MDL	1.6	PQL	mg/Kg	J	Q, L, FD
EFH (C21-C30)	7.3		0.52	MDL	1.6	PQL	mg/Kg	J	Q, L, FD
EFH (C30-C40)	29		0.52	MDL	1.6	PQL	mg/Kg	J	L, FD

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***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)	1.5		0.51	MDL	1.5	PQL	mg/Kg	J	L
EFH (C30-C40)	3.7		0.51	MDL	1.5	PQL	mg/Kg	J	L

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***Analysis Type:*** **REA2** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	2.3		0.45	MDL	1.4	PQL	mg/Kg	J	L
EFH (C30-C40)	5.9		0.45	MDL	1.4	PQL	mg/Kg	J	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***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	4.0	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	4.0	PQL	ug/Kg	UJ	L

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***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	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***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	0.59	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	0.69	J	0.43	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.6	PQL	ug/Kg	UJ	L

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***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	0.71	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.7	PQL	ug/Kg	UJ	L
Aroclor 5460	1.4	J	1.1	MDL	3.7	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5442	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	U	1.3	MDL	4.3	PQL	ug/Kg	UJ	L

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***Analysis Type:*** **RES** ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	L
Aroclor 5442	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	L
Aroclor 5460	1.3	U	1.3	MDL	4.2	PQL	ug/Kg	UJ	L

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 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	0.45	J	0.44	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5432	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L
Aroclor 5460	1.1	U	1.1	MDL	3.8	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***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	25	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
CHRYSENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	28	J	18	MDL	180	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***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	43	U	43	MDL	220	PQL	ug/Kg	UJ	Q

Method Category: SVOA

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

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***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	0.82	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.0	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.81	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***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(B)FLUORANTHENE	0.88	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.53	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***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	0.84	MDL	2.1	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-114-SA5A-SB-9.0-10.0 *Collected:* 3/11/2011 8:43:00 *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	1.2	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.5	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
FLUORANTHENE	1.3	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-227-SA5B-SB-2.5-3.5 *Collected:* 3/11/2011 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(B)FLUORANTHENE	0.80	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.94	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.75	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix: SO**

Sample ID: SL-112-SA5A-SB-14.0-15.0 *Collected:* 3/11/2011 12:16:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	730	J	680	MDL	1700	PQL	ug/Kg	J	Z

Sample ID: SL-113-SA5A-SB-14.0-15 *Collected:* 3/11/2011 3:39:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FORMALDEHYDE	840	J	650	MDL	1600	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-114-SA5A-SB-4.0-5.0 *Collected:* 3/11/2011 8:34:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
m-Terphenyl	1.9	U	1.9	MDL	4.5	PQL	mg/Kg	UJ	Q
p-Terphenyl	1.9	U	1.9	MDL	4.5	PQL	mg/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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix: SO**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **DUP09-SA5A-QC-031111** ***Collected:*** **3/11/2011 8:58:00** ***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	0.78	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: **SL-112-SA5A-SB-14.0-15.0** ***Collected:*** **3/11/2011 12:16:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.95**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.72	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: **SL-112-SA5A-SB-8.5-9.5** ***Collected:*** **3/11/2011 12:06:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.99**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.8	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: **SL-113-SA5A-SB-14.0-15** ***Collected:*** **3/11/2011 3:39:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.84**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZENE	0.12	J	0.09	MDL	3.7	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	2.2	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: **SL-113-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 3:29:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.9**

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	4.0	PQL	ug/Kg	U	B

Sample ID: **SL-114-SA5A-SB-4.0-5.0** ***Collected:*** **3/11/2011 8:34:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.94**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.29	MDL	4.9	PQL	ug/Kg	U	B

Sample ID: **SL-114-SA5A-SB-9.0-10.0** ***Collected:*** **3/11/2011 8:43:00** ***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	0.70	J	0.27	MDL	4.4	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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: **SL-227-SA5B-SB-2.5-3.5** ***Collected:*** **3/11/2011 2:10:00** ***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	0.95	J	0.26	MDL	4.4	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: DE102 **Laboratory: LL**

EDD Filename: DE102_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery 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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DE102

Method Blank Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07508AB221918	3/17/2011 7:18:00 PM	CALCIUM PHOSPHORUS TIN	8.02 mg/Kg 1.34 mg/Kg 1.44 mg/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

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
DUP09-SA5A-QC-031111(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	TIN	2.63 mg/Kg	2.63U mg/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-113-SA5A-SB-14.0-15(RES)	TIN	2.09 mg/Kg	2.09U mg/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	TIN	2.95 mg/Kg	2.95U mg/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P07526AB222150A	3/18/2011 9:50:00 PM	LEAD ZINC	0.0105 mg/Kg 0.644 mg/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P76760AB322112A	3/19/2011 9:12:00 PM	EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0.48 mg/Kg 2.6 mg/Kg 0.47 mg/Kg	SL-112-SA5A-SB-8.5-9.5
P81813AB321805A	3/24/2011 6:05:00 PM	EFH (C30-C40)	0.54 mg/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

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

Method Blank Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB95B211312A	3/15/2011 1:12:00 PM	METHYLENE CHLORIDE TOLUENE	0.67 ug/Kg 0.11 ug/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

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
DUP09-SA5A-QC-031111(RES)	METHYLENE CHLORIDE	0.78 ug/Kg	4.1U ug/Kg
SL-112-SA5A-SB-14.0-15.0(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	4.3U ug/Kg
SL-112-SA5A-SB-8.5-9.5(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.4U ug/Kg
SL-113-SA5A-SB-14.0-15(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	3.7U ug/Kg
SL-113-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.3 ug/Kg	4.0U ug/Kg
SL-114-SA5A-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.9U ug/Kg
SL-114-SA5A-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.70 ug/Kg	4.4U ug/Kg
SL-227-SA5B-SB-2.5-3.5(RES)	METHYLENE CHLORIDE	0.95 ug/Kg	4.4U ug/Kg

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLK07B260657	3/24/2011 6:57:00 AM	Di-n-butylphthalate Di-n-octylphthalate	11 ug/Kg 11 ug/Kg	DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_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-114-SA5A-SB-4.0-5.0MS	CADMIUM	128	-	75.00-125.00	-	CADMIUM	
(DUP09-SA5A-QC-031111	LEAD	162	-	75.00-125.00	-	LEAD	
SL-112-SA5A-SB-14.0-15.0	NICKEL	160	-	75.00-125.00	-	NICKEL	
SL-112-SA5A-SB-8.5-9.5	THALLIUM	128	-	75.00-125.00	-	THALLIUM	
SL-113-SA5A-SB-14.0-15							J (all detects)
SL-113-SA5A-SB-9.0-10.0							
SL-114-SA5A-SB-4.0-5.0							
SL-114-SA5A-SB-9.0-10.0							
SL-227-SA5B-SB-2.5-3.5)							
SL-114-SA5A-SB-4.0-5.0MS	ANTIMONY	50	45	75.00-125.00	-	ANTIMONY	
SL-114-SA5A-SB-4.0-5.0MSD	ZINC	66	69	75.00-125.00	-	ZINC	
(DUP09-SA5A-QC-031111							
SL-112-SA5A-SB-14.0-15.0							
SL-112-SA5A-SB-8.5-9.5							J(all detects)
SL-113-SA5A-SB-14.0-15							UJ(all non-detects)
SL-113-SA5A-SB-9.0-10.0							
SL-114-SA5A-SB-4.0-5.0							Zn No Qual, >4x
SL-114-SA5A-SB-9.0-10.0							
SL-227-SA5B-SB-2.5-3.5)							
SL-114-SA5A-SB-4.0-5.0MS	BARIUM	134	-	75.00-125.00	-	BARIUM	
(DUP09-SA5A-QC-031111							
SL-112-SA5A-SB-14.0-15.0							
SL-112-SA5A-SB-8.5-9.5							
SL-113-SA5A-SB-14.0-15							No Qual, >4x
SL-113-SA5A-SB-9.0-10.0							
SL-114-SA5A-SB-4.0-5.0							
SL-114-SA5A-SB-9.0-10.0							
SL-227-SA5B-SB-2.5-3.5)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS	ALUMINUM	1171	414	75.00-125.00	-	ALUMINUM	
SL-114-SA5A-SB-4.0-5.0MSD	CALCIUM	6342	7873	75.00-125.00	-	CALCIUM	
(DUP09-SA5A-QC-031111	TITANIUM	163	138	75.00-125.00	-	TITANIUM	
SL-112-SA5A-SB-14.0-15.0							
SL-112-SA5A-SB-8.5-9.5							
SL-113-SA5A-SB-14.0-15							No Qual, >4x
SL-113-SA5A-SB-9.0-10.0							
SL-114-SA5A-SB-4.0-5.0							
SL-114-SA5A-SB-9.0-10.0							
SL-227-SA5B-SB-2.5-3.5)							
SL-114-SA5A-SB-4.0-5.0MS	IRON	-650	-2631	75.00-125.00	-	IRON	
SL-114-SA5A-SB-4.0-5.0MSD	MAGNESIUM	-50	-194	75.00-125.00	-	MAGNESIUM	
(DUP09-SA5A-QC-031111	MANGANESE	-167	-131	75.00-125.00	-	MANGANESE	
SL-112-SA5A-SB-14.0-15.0							
SL-112-SA5A-SB-8.5-9.5							No Qual, >4x
SL-113-SA5A-SB-14.0-15							
SL-113-SA5A-SB-9.0-10.0							
SL-114-SA5A-SB-4.0-5.0							
SL-114-SA5A-SB-9.0-10.0							
SL-227-SA5B-SB-2.5-3.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_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-114-SA5A-SB-4.0-5.0MS (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	FLUORIDE	72	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Method: 1625C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	68	67	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	Di-n-butylphthalate	77	73	78.00-160.00	-	Di-n-butylphthalate	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS (SL-114-SA5A-SB-4.0-5.0)	4-CHLORO-3-METHYLPHENOL	75	-	76.00-110.00	-	4-CHLORO-3-METHYLPHENOL	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-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	DIETHYLENE GLYCOL	54	-	59.00-109.00	21 (20.00)	DIETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8330A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS (SL-114-SA5A-SB-4.0-5.0)	1,3,5-TRINITROBENZENE	137	-	82.00-126.00	-	1,3,5-TRINITROBENZENE	J(all detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MSD (SL-114-SA5A-SB-4.0-5.0)	EFH (C21-C30) EFH (C30-C40)	- -	179 -	49.00-123.00 49.00-123.00	51 (20.00) 45 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual Analysis not reported

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	m-Terphenyl p-Terphenyl	72 71	- 74	75.00-125.00 75.00-125.00	- -	m-Terphenyl p-Terphenyl	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-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	EFH (C21-C30) EFH (C30-C40)	-28 -485	-37 -518	49.00-123.00 49.00-123.00	- -	EFH (C21-C30) EFH (C30-C40)	J(all detects) R(all non-detects) EFH (C30-40) No Qual, >4x
SL-114-SA5A-SB-4.0-5.0MS **SL-114-SA5A-SB-4.0-5.0MSD** (SL-114-SA5A-SB-4.0-5.0)	EFH (C15-C20)	8	15	49.00-123.00	-	EFH (C15-C20)	J(all detects) UJ(all non-detects)

Method: 8260B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-114-SA5A-SB-4.0-5.0MSD (SL-114-SA5A-SB-4.0-5.0)	BROMOMETHANE CHLOROETHANE N-PROPYLBENZENE	- - -	- - -	42.00-168.00 39.00-152.00 39.00-157.00	32 (30.00) 32 (30.00) 32 (30.00)	BROMOMETHANE CHLOROETHANE N-PROPYLBENZENE	J(all detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-114-SA5A-SB-4.0-5.0DUP	ANTIMONY	36	20.00	
(DUP09-SA5A-QC-031111	ARSENIC	23	20.00	J (all detects)
SL -112-SA5A-SB-14.0-15.0	BARIUM	23	20.00	UJ (all non-detects)
SL -112-SA5A-SB-8.5-9.5	CADMIUM	49	20.00	
SL -113-SA5A-SB-14.0-15	SELENIUM	62	20.00	Sb, Cd, Se, Ag, Tl
SL -113-SA5A-SB-9.0-10.0	SILVER	25	20.00	No Qual
SL -114-SA5A-SB-4.0-5.0	THALLIUM	25	20.00	OK by difference
SL -114-SA5A-SB-9.0-10.0				
SL -227-SA5B-SB-2.5-3.5)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-114-SA5A-SB-4.0-5.0DUP	MERCURY	43	20.00	
(DUP09-SA5A-QC-031111				
SL -112-SA5A-SB-14.0-15.0				
SL -112-SA5A-SB-8.5-9.5				No Qual
SL -113-SA5A-SB-14.0-15				OK by difference
SL -113-SA5A-SB-9.0-10.0				
SL -114-SA5A-SB-4.0-5.0				
SL -114-SA5A-SB-9.0-10.0				
SL -227-SA5B-SB-2.5-3.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_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
P10754AY240521A (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-112-SA5A-SB-8.5-9.5 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	Aroclor 5442	-	74	75.00-125.00	-	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8015M
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P10813AQ321831A (DUP09-SA5A-QC-031111 SL-112-SA5A-SB-14.0-15.0 SL-113-SA5A-SB-14.0-15 SL-113-SA5A-SB-9.0-10.0 SL-114-SA5A-SB-4.0-5.0 SL-114-SA5A-SB-9.0-10.0 SL-227-SA5B-SB-2.5-3.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	118 121 126 116	- - - -	66.00-113.00 66.00-113.00 66.00-113.00 66.00-113.00	- - - -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40)	J(all detects)

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

Field Duplicate RPD Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
MOISTURE	22.8	17.7	25		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
FLUORIDE	6.6	5.2	24	50.00	No Qualifiers Applied
Nitrate-NO3	2.2	2.0	10	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
ALUMINUM	37200	35100	6	50.00	
BORON	13.8	12.4	11	50.00	
IRON	34200	34500	1	50.00	
LITHIUM	33.0	29.6	11	50.00	
MAGNESIUM	8320	8330	0	50.00	
MANGANESE	454	388	16	50.00	
PHOSPHORUS	246	313	24	50.00	No Qualifiers Applied
POTASSIUM	3430	3920	13	50.00	
SODIUM	284	211	29	50.00	
STRONTIUM	67.4	56.2	18	50.00	
TIN	3.11	3.01	3	50.00	
TITANIUM	1570	1530	3	50.00	
Zirconium	5.57	5.35	4	50.00	
CALCIUM	35900	18500	64	50.00	J(all detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
ANTIMONY	0.290	0.227	24	50.00	
ARSENIC	9.31	8.98	4	50.00	
BARIUM	152	160	5	50.00	
BERYLLIUM	1.14	1.08	5	50.00	
CADMIUM	0.445	0.383	15	50.00	
CHROMIUM	44.3	39.2	12	50.00	
COBALT	10.3	12.3	18	50.00	
COPPER	17.7	17.7	0	50.00	No Qualifiers Applied
LEAD	13.3	13.2	1	50.00	
MOLYBDENUM	0.350	0.458	27	50.00	
NICKEL	27.7	29.7	7	50.00	
SELENIUM	0.162	0.162	0	50.00	
SILVER	0.0781	0.0505	43	50.00	
THALLIUM	0.419	0.441	5	50.00	
VANADIUM	82.1	75.8	8	50.00	
ZINC	82.1	89.9	9	50.00	

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

Field Duplicate RPD Report

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
HEXAVALENT CHROMIUM	1.3 U	0.29	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
MERCURY	0.0091	0.0083	9	50.00	No Qualifiers Applied

Method: 8015M
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
EFH (C15-C20)	2.0	1.4 U	200	50.00	J(all detects) UJ(all non-detects)
EFH (C21-C30)	7.3	1.0	152	50.00	
EFH (C30-C40)	29	2.9	164	50.00	

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
METHYLENE CHLORIDE	1.0	0.78	25	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
PH	8.06	11.5	35	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-114-SA5A-SB-4.0-5.0	DUP09-SA5A-QC-031111			
Oxidation Reduction Potential	328	388	17		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5A-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	351	421	PQL	ng/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	TIN	J	3.01	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.35	5.96	PQL	mg/Kg	
SL-112-SA5A-SB-14.0-15.0	BORON	J	4.47	5.47	PQL	mg/Kg	J (all detects)
	TIN	J	2.63	10.9	PQL	mg/Kg	
SL-112-SA5A-SB-8.5-9.5	BORON	J	4.79	5.49	PQL	mg/Kg	J (all detects)
	TIN	J	2.79	11.0	PQL	mg/Kg	
	Zirconium	J	1.74	5.49	PQL	mg/Kg	
SL-113-SA5A-SB-14.0-15	BORON	J	2.77	5.29	PQL	mg/Kg	J (all detects)
	TIN	J	2.09	10.6	PQL	mg/Kg	
SL-113-SA5A-SB-9.0-10.0	BORON	J	4.17	5.58	PQL	mg/Kg	J (all detects)
	TIN	J	2.57	11.2	PQL	mg/Kg	
	Zirconium	J	0.941	5.58	PQL	mg/Kg	
SL-114-SA5A-SB-4.0-5.0	TIN	J	3.11	12.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.57	6.23	PQL	mg/Kg	
SL-114-SA5A-SB-9.0-10.0	TIN	J	2.95	12.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.48	6.13	PQL	mg/Kg	
SL-227-SA5B-SB-2.5-3.5	BORON	J	5.19	5.54	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	11.1	PQL	mg/Kg	
	Zirconium	J	2.06	5.54	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	ANTIMONY	J	0.227	0.241	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.162	0.481	PQL	mg/Kg	
	SILVER	J	0.0505	0.120	PQL	mg/Kg	
SL-112-SA5A-SB-14.0-15.0	CADMIUM	J	0.0949	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.119	0.446	PQL	mg/Kg	
	SILVER	J	0.0247	0.112	PQL	mg/Kg	
SL-112-SA5A-SB-8.5-9.5	SELENIUM	J	0.0998	0.426	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0245	0.107	PQL	mg/Kg	
SL-113-SA5A-SB-14.0-15	SILVER	J	0.0263	0.106	PQL	mg/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	SELENIUM	J	0.0866	0.451	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0199	0.113	PQL	mg/Kg	
SL-114-SA5A-SB-4.0-5.0	SELENIUM	J	0.162	0.503	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0781	0.126	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-114-SA5A-SB-9.0-10.0	ANTIMONY	J	0.187	0.248	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.134	0.495	PQL	mg/Kg	
	SILVER	J	0.0375	0.124	PQL	mg/Kg	
SL-227-SA5B-SB-2.5-3.5	ANTIMONY	J	0.0901	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.145	0.447	PQL	mg/Kg	
	SILVER	J	0.0645	0.112	PQL	mg/Kg	

Method: 7199
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	HEXAVALENT CHROMIUM	J	0.29	1.2	PQL	mg/Kg	J (all detects)
SL-112-SA5A-SB-8.5-9.5	HEXAVALENT CHROMIUM	J	0.23	1.1	PQL	mg/Kg	J (all detects)
SL-227-SA5B-SB-2.5-3.5	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	MERCURY	J	0.0083	0.115	PQL	mg/Kg	J (all detects)
SL-112-SA5A-SB-14.0-15.0	MERCURY	J	0.0162	0.106	PQL	mg/Kg	J (all detects)
SL-112-SA5A-SB-8.5-9.5	MERCURY	J	0.0093	0.107	PQL	mg/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	MERCURY	J	0.0337	0.105	PQL	mg/Kg	J (all detects)
SL-114-SA5A-SB-4.0-5.0	MERCURY	J	0.0091	0.125	PQL	mg/Kg	J (all detects)
SL-114-SA5A-SB-9.0-10.0	MERCURY	J	0.0079	0.119	PQL	mg/Kg	J (all detects)

Method: 8015M
Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	EFH (C21-C30)	J	1.0	1.4	PQL	mg/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	EFH (C21-C30)	J	1.2	1.3	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-8.5-9.5	AROCLOR 1260	J	0.59	1.9	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	AROCLOR 1260	J	0.69	1.9	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	AROCLOR 1260 Aroclor 5460	J J	0.71 1.4	1.9 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-227-SA5B-SB-2.5-3.5	AROCLOR 1260	J	0.45	1.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP09-SA5A-QC-031111	METHYLENE CHLORIDE	J	0.78	4.1	PQL	ug/Kg	J (all detects)
SL-112-SA5A-SB-14.0-15.0	METHYLENE CHLORIDE	J	0.72	4.3	PQL	ug/Kg	J (all detects)
SL-112-SA5A-SB-8.5-9.5	METHYLENE CHLORIDE	J	1.8	4.4	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	BENZENE METHYLENE CHLORIDE	J J	0.12 2.2	3.7 3.7	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	1.3	4.0	PQL	ug/Kg	J (all detects)
SL-114-SA5A-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.0	4.9	PQL	ug/Kg	J (all detects)
SL-114-SA5A-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.70	4.4	PQL	ug/Kg	J (all detects)
SL-227-SA5B-SB-2.5-3.5	METHYLENE CHLORIDE	J	0.95	4.4	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-8.5-9.5	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE CHRYSENE FLUORANTHENE PYRENE	J J J J J J	25 20 25 24 20 28	180 180 180 180 180 180	PQL PQL PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-14.0-15.0	CHRYSENE FLUORANTHENE PHENANTHRENE PYRENE	J J J J	0.82 1.0 1.1 1.1	1.9 1.9 1.9 1.9	PQL PQL PQL PQL	ug/Kg ug/Kg ug/Kg ug/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: DE102 **Laboratory: LL**

EDD Filename: DE102_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-8.5-9.5	DIBENZO(A,H)ANTHRACENE	J	0.78	1.8	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.5	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.88	1.8	PQL	ug/Kg	
SL-113-SA5A-SB-14.0-15	NAPHTHALENE	J	0.81	1.8	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	0.88	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.53	1.9	PQL	ug/Kg	
SL-114-SA5A-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.2	2.1	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	2.1	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.5	2.1	PQL	ug/Kg	
	CHRYSENE	J	1.5	2.1	PQL	ug/Kg	
	FLUORANTHENE	J	1.3	2.1	PQL	ug/Kg	
	PYRENE	J	1.3	2.1	PQL	ug/Kg	
SL-227-SA5B-SB-2.5-3.5	BENZO(B)FLUORANTHENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.94	1.9	PQL	ug/Kg	
	CHRYSENE	J	0.75	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.9	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-112-SA5A-SB-14.0-15.0	FORMALDEHYDE	J	730	1700	PQL	ug/Kg	J (all detects)
SL-113-SA5A-SB-14.0-15	FORMALDEHYDE	J	840	1600	PQL	ug/Kg	J (all detects)

LDC #: 25786A4 **VALIDATION COMPLETENESS WORKSHEET** Date: 7/8/11
SDG #: DE102 ADR Page: 1 of
Laboratory: Lancaster Laboratories Reviewer:
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	—	
III.	Calibration	—	
IV.	Blanks	A	ICB/CCB hits - No qual
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ba, Ca, Fe, Mg, Mn, Ti, V, Zn > 4X)
VII.	Duplicate Sample Analysis	N	Dup (Sb, Cd, Hg, Se, Ag, Tl
VIII.	Laboratory Control Samples (LCS)	A	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	—	

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: SO, 1

1	DUP09-SA5A-QC-031111	11	SL-114-SA5A-SB-4.0-5.0DUP	21		31	
2	SL-112-SA5A-SB-8.5-9.5	12		22		32	
3	SL-112-SA5A-SB-14.0-15.0	13		23		33	
4	SL-114-SA5A-SB-4.0-5.0	14		24		34	
5	SL-114-SA5A-SB-9.0-10.0	15		25		35	
6	SL-113-SA5A-SB-9.0-10.0	16		26		36	
7	SL-113-SA5A-SB-14.0-15.0	17		27		37	
8	SL-227-SA5B-SB-2.5-3.5	18		28		38	
9	SL-114-SA5A-SB-4.0-5.0MS	19		29		39	
10	SL-114-SA5A-SB-4.0-5.0MSD	20		30		40	

Notes:

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE102
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6228978BKG Serial Dilution Lab Sample ID: 6228978L
Batch ID(s): P07508A, P07526A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		298373.3200		306656.1500		3		P
Antimony	121	1.1530		1.5000	U	100		MS
Arsenic	75	37.0100		31.2250		16		MS
Barium	137	603.6000		522.0000		14	E	MS
Beryllium	9	4.5460		4.4185		3		MS
Boron		111.0400		132.9500	B	20		P
Cadmium	111	1.7710		1.2755	B	28		MS
Calcium		288486.7800		302765.0000		5		P
Chromium	52	176.3000		173.1000		2		MS
Cobalt	59	41.0300		42.3250		3		MS
Copper	63	70.2900		89.6000		27	E	MS
Iron		54857.5200		54285.6000		1		P
Lead	208	52.8500		44.9200		15	E	MS
Lithium		265.1900		273.5000		3		P
Magnesium		66823.9800		69099.1000		3		P
Manganese		3642.4700		3984.8000		9		P
Molybdenum	98	1.3910		1.3655	B	2		MS
Nickel	60	110.0000		91.4000		17	E	MS
Phosphorus		1977.2600		2040.8000		3		P
Potassium		27559.8600		28020.2500		2		P
Selenium	78	0.6422	B	1.0000	U	100		MS
Silver	107	0.3107	B	0.3684	B	19		MS
Sodium		2279.0800		2325.1000	B	2		P
Strontium		541.0100		571.3500		6		P
Thallium	203	1.6660		1.5315	B	8		MS
Tin		24.9400	B	50.0000	U	100		P
Titanium		12580.4600		13738.4000		9		P
Vanadium	51	326.6000		319.0500		2		MS
Zinc	66	326.4000		261.0500		20	E	MS
Zirconium		44.7000	B	61.3500	B	37		P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ

FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DX015

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-Dec-2010	SL-297-SA5B-SS-0.0-0.5	6162800	N	METHOD	1613B	III
08-Dec-2010	SL-281-SA5B-SS-0.0-0.5	6162797	N	METHOD	1613B	III
08-Dec-2010	SL-295-SA5B-SS-0.0-0.5	6162798	N	METHOD	1613B	III
08-Dec-2010	SL-039-SA5B-SS-0.0-0.5	6162795	N	METHOD	1613B	III
08-Dec-2010	SL-026-SA5B-SS-0.0-0.5	6162793	N	METHOD	1613B	III
08-Dec-2010	SL-296-SA5B-SS-0.0-0.5	6162799	N	METHOD	1613B	III
08-Dec-2010	SL-280-SA5B-SS-0.0-0.5	6162796	N	METHOD	1613B	III
08-Dec-2010	SL-308-SA5B-SS-0.0-0.5	6162801	N	METHOD	1613B	III
08-Dec-2010	SL-038-SA5B-SS-0.0-0.5	6162794	N	METHOD	1613B	III
08-Dec-2010	SL-283-SA5B-SS-0.0-0.5	6162804	N	METHOD	1613B	III
08-Dec-2010	SL-282-SA5B-SS-0.0-0.5	6162803	N	METHOD	1613B	III
08-Dec-2010	SL-032-SA5B-SS-0.0-0.5	6162802	N	METHOD	1613B	III
09-Dec-2010	SL-293-SA5B-SS-0.0-0.5	6162806	N	METHOD	1613B	III
09-Dec-2010	SL-292-SA5B-SS-0.0-0.5	6162805	N	METHOD	1613B	III
09-Dec-2010	SL-004-SA5B-SS-0.0-0.5	6162811	N	METHOD	1613B	III
09-Dec-2010	SL-003-SA5B-SS-0.0-0.5	6162808	N	METHOD	1613B	III
09-Dec-2010	SL-005-SA5B-SS-0.0-0.5	6162810	N	METHOD	1613B	III
09-Dec-2010	SL-231-SA5B-SS-0.0-0.5	6162807	N	METHOD	1613B	III
09-Dec-2010	SL-230-SA5B-SS-0.0-0.5	6162809	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: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-003-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 1:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.14	JB	0.0377	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.34	JB	0.0391	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.776	JB	0.0362	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.71	JB	0.0402	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.918	JB	0.0332	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.79	JB	0.0402	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.263	JBQ	0.0405	MDL	5.43	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.697	JB	0.0538	MDL	5.43	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.249	JB	0.0193	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.21	JB	0.0343	MDL	5.43	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.364	JB	0.0178	MDL	5.43	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0585	JBQ	0.0279	MDL	1.09	PQL	ng/Kg	U	B

Sample ID: SL-004-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,7,8,9-HPCDF	1.85	JB	0.0402	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.56	JB	0.0401	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.04	JB	0.0359	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.78	JB	0.0347	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.283	JB	0.0393	MDL	5.37	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.90	JB	0.0620	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.287	JBQ	0.0180	MDL	5.37	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	2.73	JB	0.0349	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.561	JBQ	0.0161	MDL	5.37	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.150	JQ	0.0215	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.114	JB	0.0320	MDL	1.07	PQL	ng/Kg	U	B

Sample ID: SL-005-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,7,8,9-HPCDF	2.61	JB	0.0703	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	5.06	JB	0.0568	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.77	JB	0.0551	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.87	JB	0.0534	MDL	5.25	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-005-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,7,8,9-HXCDF	0.583	JB	0.0630	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	2.65	JB	0.102	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.453	JB	0.0338	MDL	5.25	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	3.82	JB	0.0541	MDL	5.25	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.891	JB	0.0313	MDL	5.25	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.278	JQ	0.0387	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.213	JBQ	0.0541	MDL	1.05	PQL	ng/Kg	J	Z

Sample ID: SL-026-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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	1.36	JB	0.0289	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.195	JB	0.0372	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0993	JB	0.0302	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.210	JBQ	0.0251	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.344	JB	0.0323	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.187	JBQ	0.0233	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.354	JBQ	0.0313	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.198	JBQ	0.0287	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.152	JBQ	0.0269	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.212	JB	0.0136	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.227	JB	0.0248	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.250	JB	0.0125	MDL	5.35	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0323	JQ	0.0199	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0585	JBQ	0.0255	MDL	1.07	PQL	ng/Kg	U	B
OCDF	2.30	JB	0.0260	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-032-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:55:00 *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	1.76	JB	0.0195	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.207	JB	0.0303	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.106	JBQ	0.0329	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.244	JB	0.0247	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.399	JBQ	0.0332	MDL	5.42	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-032-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:55:00 *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	0.185	JB	0.0217	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.306	JBQ	0.0336	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.186	JBQ	0.0295	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0889	JB	0.0303	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.153	JBQ	0.0144	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.305	JB	0.0235	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.209	JB	0.0133	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0314	JBQ	0.0270	MDL	1.08	PQL	ng/Kg	U	B
OCDF	3.05	JB	0.0345	MDL	10.8	PQL	ng/Kg	U	B

Sample ID: SL-038-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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-HPCDF	1.76	JB	0.0258	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.239	JB	0.0322	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.133	JBQ	0.0383	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.181	JBQ	0.0281	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.419	JB	0.0390	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.170	JB	0.0257	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.302	JBQ	0.0384	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.163	JB	0.0304	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.144	JBQ	0.0376	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.165	JBQ	0.0169	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.267	JB	0.0268	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.213	JBQ	0.0156	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0293	JQ	0.0273	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	3.09	JB	0.0366	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-039-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 10:48:00 *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	2.22	JB	0.0230	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.317	JBQ	0.0322	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0863	JBQ	0.0293	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.327	JBQ	0.0272	MDL	5.46	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-039-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 10:48:00 *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	0.368	JB	0.0313	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.265	JB	0.0247	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.301	JBQ	0.0295	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.233	JBQ	0.0311	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0812	JBQ	0.0309	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.129	JBQ	0.0164	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.521	JB	0.0261	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.303	JB	0.0166	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0596	JBQ	0.0267	MDL	1.09	PQL	ng/Kg	U	B
OCDF	3.05	JB	0.0296	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-230-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 2:48:00 *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	1.22	JB	0.0437	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.02	JB	0.0495	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.904	JBQ	0.0366	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.42	JB	0.0512	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.27	JB	0.0353	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.24	JB	0.0524	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.346	JB	0.0406	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.18	JB	0.0680	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.315	JB	0.0250	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.65	JB	0.0354	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.600	JB	0.0226	MDL	5.56	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.200	JQ	0.0313	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SL-231-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 2:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.575	JB	0.0280	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.475	JB	0.0382	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.495	JB	0.0305	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.38	JB	0.0397	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.354	JBQ	0.0286	MDL	5.22	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 Laboratory: LL

EDD Filename: DX015_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-231-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 2:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	1.10	JB	0.0373	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.210	JBQ	0.0331	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.300	JB	0.0358	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.117	JBQ	0.0161	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.564	JB	0.0297	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.288	JB	0.0153	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0294	JQ	0.0184	MDL	1.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0427	JBQ	0.0241	MDL	1.04	PQL	ng/Kg	U	B

Sample ID: SL-280-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 11:46:00 *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-HPCDF	3.05	JB	0.0279	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.289	JB	0.0362	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.142	JB	0.0402	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.318	JBQ	0.0299	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.685	JB	0.0410	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.274	JBQ	0.0277	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.378	JBQ	0.0398	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.199	JBQ	0.0342	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.138	JBQ	0.0345	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.136	JBQ	0.0168	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.483	JB	0.0296	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.266	JBQ	0.0161	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0449	JBQ	0.0314	MDL	1.09	PQL	ng/Kg	U	B
OCDF	4.77	JB	0.0289	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-281-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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	2.61	JB	0.0317	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.306	JBQ	0.0400	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.170	JB	0.0377	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.254	JB	0.0283	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.412	JBQ	0.0398	MDL	5.55	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-281-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 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
1,2,3,6,7,8-HXCDF	0.217	JBQ	0.0265	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.285	JBQ	0.0380	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.167	JBQ	0.0313	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.181	JBQ	0.0384	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.239	JB	0.0211	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.344	JB	0.0275	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.516	JB	0.0190	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0842	JB	0.0364	MDL	1.11	PQL	ng/Kg	U	B
OCDF	4.58	JB	0.0326	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-282-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 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	2.16	JB	0.0208	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.264	JBQ	0.0299	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0574	JBQ	0.0277	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.266	JB	0.0237	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.344	JB	0.0285	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.265	JB	0.0213	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.341	JBQ	0.0289	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.261	JBQ	0.0278	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.159	JB	0.0158	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.390	JB	0.0223	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.285	JBQ	0.0153	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0479	JBQ	0.0305	MDL	1.08	PQL	ng/Kg	U	B
OCDF	3.76	JB	0.0231	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-283-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 1:25:00 ***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	2.22	JB	0.0234	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.290	JBQ	0.0352	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.126	JBQ	0.0315	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.196	JBQ	0.0223	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.495	JB	0.0319	MDL	5.46	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-283-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 1:25:00 ***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	0.187	JBQ	0.0200	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.382	JB	0.0319	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.147	JBQ	0.0263	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0900	JBQ	0.0280	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.105	JBQ	0.0138	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.336	JB	0.0217	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.192	JB	0.0134	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0401	JBQ	0.0222	MDL	1.09	PQL	ng/Kg	U	B
OCDF	5.04	JB	0.0302	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-292-SA5B-SS-0.0-0.5 ***Collected:*** 12/9/2010 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	3.17	JB	0.0709	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.68	JB	0.0654	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.03	JB	0.0557	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.42	JB	0.0517	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.39	JB	0.0698	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.790	JB	0.0688	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.798	JBQ	0.0644	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.356	JBQ	0.0248	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.65	JB	0.0539	MDL	5.33	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.623	JB	0.0257	MDL	5.33	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0537	JQ	0.0255	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0795	JB	0.0321	MDL	1.07	PQL	ng/Kg	U	B
OCDD	4430	EB	0.182	MDL	10.7	PQL	ng/Kg	J	*XI

Sample ID: SL-293-SA5B-SS-0.0-0.5 ***Collected:*** 12/9/2010 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
1,2,3,4,7,8,9-HPCDF	0.819	JB	0.0544	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.724	JBQ	0.0501	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.686	JB	0.0379	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.60	JB	0.0516	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.470	JB	0.0357	MDL	5.59	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-293-SA5B-SS-0.0-0.5 ***Collected:*** 12/9/2010 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
1,2,3,7,8,9-HXCDD	1.60	JB	0.0506	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.325	JB	0.0421	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.400	JB	0.0520	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.175	JBQ	0.0223	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.736	JB	0.0367	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.261	JBQ	0.0204	MDL	5.59	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0280	JQ	0.0242	MDL	1.12	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0582	JBQ	0.0334	MDL	1.12	PQL	ng/Kg	U	B

Sample ID: SL-295-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 10:34:00 ***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-HPCDF	1.66	JB	0.0477	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.245	JBQ	0.0638	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0838	JBQ	0.0346	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.232	JBQ	0.0341	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.384	JB	0.0351	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.222	JBQ	0.0319	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.352	JBQ	0.0365	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.229	JBQ	0.0412	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0765	JBQ	0.0488	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.135	JBQ	0.0213	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.358	JB	0.0325	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.212	JBQ	0.0201	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0530	JBQ	0.0367	MDL	1.10	PQL	ng/Kg	U	B
OCDF	2.11	JB	0.0469	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-296-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 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
1,2,3,4,6,7,8-HPCDF	1.24	JB	0.0215	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.193	JBQ	0.0312	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0563	JB	0.0297	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.168	JBQ	0.0209	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.239	JBQ	0.0303	MDL	5.45	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-296-SA5B-SS-0.0-0.5 **Collected:** 12/8/2010 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
1,2,3,6,7,8-HXCDF	0.139	JB	0.0198	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.231	JB	0.0325	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.169	JBQ	0.0264	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.104	JB	0.0303	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.101	JB	0.0150	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.218	JB	0.0205	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.138	JB	0.0135	MDL	5.45	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0303	JBQ	0.0227	MDL	1.09	PQL	ng/Kg	U	B
OCDF	2.13	JB	0.0318	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-297-SA5B-SS-0.0-0.5 **Collected:** 12/8/2010 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-HPCDF	3.45	JB	0.0487	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.428	JBQ	0.0580	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.250	JBQ	0.0459	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.401	JB	0.0344	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.689	JB	0.0488	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.391	JBQ	0.0334	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.496	JB	0.0443	MDL	5.57	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.313	JBQ	0.0371	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.317	JBQ	0.0386	MDL	5.57	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.261	JBQ	0.0219	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.641	JB	0.0333	MDL	5.57	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.397	JB	0.0197	MDL	5.57	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0905	JQ	0.0223	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0890	JB	0.0308	MDL	1.11	PQL	ng/Kg	U	B
OCDF	5.29	JB	0.0371	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-308-SA5B-SS-0.0-0.5 **Collected:** 12/8/2010 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
1,2,3,4,6,7,8-HPCDF	1.56	JB	0.0300	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.255	JBQ	0.0430	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.119	JBQ	0.0442	MDL	5.46	PQL	ng/Kg	U	B

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

Method: **1613B** ***Matrix:*** **SO**

Sample ID: SL-308-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 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*
1,2,3,4,7,8-HXCDF	0.210	JBQ	0.0316	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.299	JB	0.0447	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.199	JB	0.0290	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.337	JBQ	0.0443	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.275	JBQ	0.0359	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.195	JBQ	0.0344	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.211	JB	0.0168	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.296	JB	0.0308	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.237	JB	0.0169	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0507	JQ	0.0230	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0578	JBQ	0.0288	MDL	1.09	PQL	ng/Kg	U	B
OCDF	3.01	JB	0.0474	MDL	10.9	PQL	ng/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_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
*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	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX015

Method Blank Outlier Report

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371537	12/22/2010 3:37:00 PM	1,2,3,4,6,7,8-HPCDD	0.366 ng/Kg	SL-003-SA5B-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.846 ng/Kg	SL-004-SA5B-SS-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.200 ng/Kg	SL-005-SA5B-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0584 ng/Kg	SL-026-SA5B-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.174 ng/Kg	SL-032-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0687 ng/Kg	SL-038-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.168 ng/Kg	SL-039-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0974 ng/Kg	SL-230-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.179 ng/Kg	SL-231-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.105 ng/Kg	SL-280-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0949 ng/Kg	SL-281-SA5B-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.250 ng/Kg	SL-282-SA5B-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.199 ng/Kg	SL-283-SA5B-SS-0.0-0.5
		2,3,7,8-TCDF	0.0251 ng/Kg	SL-292-SA5B-SS-0.0-0.5
		OCDD	0.537 ng/Kg	SL-293-SA5B-SS-0.0-0.5
		OCDF	0.628 ng/Kg	SL-295-SA5B-SS-0.0-0.5
				SL-296-SA5B-SS-0.0-0.5
				SL-297-SA5B-SS-0.0-0.5
				SL-308-SA5B-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-003-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.776 ng/Kg	0.776U ng/Kg
SL-003-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.263 ng/Kg	0.263U ng/Kg
SL-003-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.249 ng/Kg	0.249U ng/Kg
SL-003-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	1.21 ng/Kg	1.21U ng/Kg
SL-003-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.364 ng/Kg	0.364U ng/Kg
SL-003-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0585 ng/Kg	0.0585U ng/Kg
SL-004-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.283 ng/Kg	0.283U ng/Kg
SL-004-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.287 ng/Kg	0.287U ng/Kg
SL-004-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.561 ng/Kg	0.561U ng/Kg
SL-004-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.114 ng/Kg	0.114U ng/Kg
SL-005-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.583 ng/Kg	0.583U ng/Kg
SL-005-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.453 ng/Kg	0.453U ng/Kg
SL-005-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.891 ng/Kg	0.891U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.36 ng/Kg	1.36U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.195 ng/Kg	0.195U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0993 ng/Kg	0.0993U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.210 ng/Kg	0.210U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.187 ng/Kg	0.187U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.354 ng/Kg	0.354U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.198 ng/Kg	0.198U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.152 ng/Kg	0.152U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.212 ng/Kg	0.212U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.227 ng/Kg	0.227U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.250 ng/Kg	0.250U ng/Kg
SL-026-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0585 ng/Kg	0.0585U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_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-026-SA5B-SS-0.0-0.5(RES)	OCDF	2.30 ng/Kg	2.30U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.76 ng/Kg	1.76U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.207 ng/Kg	0.207U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.106 ng/Kg	0.106U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.244 ng/Kg	0.244U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.185 ng/Kg	0.185U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.306 ng/Kg	0.306U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.186 ng/Kg	0.186U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0889 ng/Kg	0.0889U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.153 ng/Kg	0.153U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.305 ng/Kg	0.305U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.209 ng/Kg	0.209U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0314 ng/Kg	0.0314U ng/Kg
SL-032-SA5B-SS-0.0-0.5(RES)	OCDF	3.05 ng/Kg	3.05U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.76 ng/Kg	1.76U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.239 ng/Kg	0.239U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.133 ng/Kg	0.133U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.170 ng/Kg	0.170U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.302 ng/Kg	0.302U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.163 ng/Kg	0.163U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.144 ng/Kg	0.144U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.165 ng/Kg	0.165U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.267 ng/Kg	0.267U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.213 ng/Kg	0.213U ng/Kg
SL-038-SA5B-SS-0.0-0.5(RES)	OCDF	3.09 ng/Kg	3.09U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.22 ng/Kg	2.22U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.317 ng/Kg	0.317U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0863 ng/Kg	0.0863U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.327 ng/Kg	0.327U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.265 ng/Kg	0.265U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.301 ng/Kg	0.301U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.233 ng/Kg	0.233U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0812 ng/Kg	0.0812U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.129 ng/Kg	0.129U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.521 ng/Kg	0.521U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.303 ng/Kg	0.303U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_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-039-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0596 ng/Kg	0.0596U ng/Kg
SL-039-SA5B-SS-0.0-0.5(RES)	OCDF	3.05 ng/Kg	3.05U ng/Kg
SL-230-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.348 ng/Kg	0.346U ng/Kg
SL-230-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.315 ng/Kg	0.315U ng/Kg
SL-230-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.600 ng/Kg	0.600U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.575 ng/Kg	0.575U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.495 ng/Kg	0.495U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.354 ng/Kg	0.354U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.210 ng/Kg	0.210U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.300 ng/Kg	0.300U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.117 ng/Kg	0.117U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.564 ng/Kg	0.564U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.288 ng/Kg	0.288U ng/Kg
SL-231-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0427 ng/Kg	0.0427U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	3.05 ng/Kg	3.05U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.289 ng/Kg	0.289U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.142 ng/Kg	0.142U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.318 ng/Kg	0.318U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.274 ng/Kg	0.274U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.378 ng/Kg	0.378U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.199 ng/Kg	0.199U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.138 ng/Kg	0.138U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.483 ng/Kg	0.483U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.266 ng/Kg	0.266U ng/Kg
SL-280-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0449 ng/Kg	0.0449U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.61 ng/Kg	2.61U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.306 ng/Kg	0.306U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.170 ng/Kg	0.170U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.254 ng/Kg	0.254U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.285 ng/Kg	0.285U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.167 ng/Kg	0.167U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.181 ng/Kg	0.181U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.239 ng/Kg	0.239U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.344 ng/Kg	0.344U ng/Kg
SL-281-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.516 ng/Kg	0.516U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_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-281-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0842 ng/Kg	0.0842U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.18 ng/Kg	2.16U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.264 ng/Kg	0.264U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0574 ng/Kg	0.0574U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.266 ng/Kg	0.266U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.265 ng/Kg	0.265U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.341 ng/Kg	0.341U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.261 ng/Kg	0.261U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.159 ng/Kg	0.159U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.390 ng/Kg	0.390U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.285 ng/Kg	0.285U ng/Kg
SL-282-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0479 ng/Kg	0.0479U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.22 ng/Kg	2.22U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.290 ng/Kg	0.290U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.126 ng/Kg	0.126U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.187 ng/Kg	0.187U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.382 ng/Kg	0.382U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.147 ng/Kg	0.147U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0900 ng/Kg	0.0900U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.105 ng/Kg	0.105U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.336 ng/Kg	0.336U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.192 ng/Kg	0.192U ng/Kg
SL-283-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0401 ng/Kg	0.0401U ng/Kg
SL-292-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.790 ng/Kg	0.790U ng/Kg
SL-292-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.356 ng/Kg	0.356U ng/Kg
SL-292-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.623 ng/Kg	0.623U ng/Kg
SL-292-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0795 ng/Kg	0.0795U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.819 ng/Kg	0.819U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.686 ng/Kg	0.686U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.470 ng/Kg	0.470U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.325 ng/Kg	0.325U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.400 ng/Kg	0.400U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.175 ng/Kg	0.175U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.736 ng/Kg	0.736U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.281 ng/Kg	0.261U ng/Kg
SL-293-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0582 ng/Kg	0.0582U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_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-295-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.66 ng/Kg	1.66U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.245 ng/Kg	0.245U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0838 ng/Kg	0.0838U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.232 ng/Kg	0.232U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.222 ng/Kg	0.222U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.352 ng/Kg	0.352U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.229 ng/Kg	0.229U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0765 ng/Kg	0.0765U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.135 ng/Kg	0.135U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.358 ng/Kg	0.358U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.212 ng/Kg	0.212U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0530 ng/Kg	0.0530U ng/Kg
SL-295-SA5B-SS-0.0-0.5(RES)	OCDF	2.11 ng/Kg	2.11U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.24 ng/Kg	1.24U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.193 ng/Kg	0.193U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0563 ng/Kg	0.0563U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.168 ng/Kg	0.168U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.239 ng/Kg	0.239U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.139 ng/Kg	0.139U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.231 ng/Kg	0.231U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.169 ng/Kg	0.169U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.104 ng/Kg	0.104U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.101 ng/Kg	0.101U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.218 ng/Kg	0.218U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.138 ng/Kg	0.138U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0303 ng/Kg	0.0303U ng/Kg
SL-296-SA5B-SS-0.0-0.5(RES)	OCDF	2.13 ng/Kg	2.13U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	3.45 ng/Kg	3.45U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.428 ng/Kg	0.428U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.250 ng/Kg	0.250U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.401 ng/Kg	0.401U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.391 ng/Kg	0.391U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.313 ng/Kg	0.313U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.317 ng/Kg	0.317U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.261 ng/Kg	0.261U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.641 ng/Kg	0.641U ng/Kg
SL-297-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.397 ng/Kg	0.397U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_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-297-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0890 ng/Kg	0.0890U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.56 ng/Kg	1.56U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.255 ng/Kg	0.255U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.119 ng/Kg	0.119U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.210 ng/Kg	0.210U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.299 ng/Kg	0.299U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.199 ng/Kg	0.199U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.337 ng/Kg	0.337U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.275 ng/Kg	0.275U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.195 ng/Kg	0.195U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.211 ng/Kg	0.211U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.296 ng/Kg	0.296U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.237 ng/Kg	0.237U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0578 ng/Kg	0.0578U ng/Kg
SL-308-SA5B-SS-0.0-0.5(RES)	OCDF	3.01 ng/Kg	3.01U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX015 Laboratory: LL

EDD Filename: DX015_v1 eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.14	5.43	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.34	5.43	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.776	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.71	5.43	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.918	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.79	5.43	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.263	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.697	5.43	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.249	5.43	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.21	5.43	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.364	5.43	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0585	1.09	PQL	ng/Kg	
SL-004-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.85	5.37	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	3.56	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.04	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.78	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.283	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.90	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.287	5.37	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.73	5.37	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.561	5.37	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.150	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.114	1.07	PQL	ng/Kg	
SL-005-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.61	5.25	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	5.06	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.77	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.87	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.583	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.65	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.453	5.25	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	3.82	5.25	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.891	5.25	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.278	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.213	1.05	PQL	ng/Kg	
SL-026-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.36	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.195	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0993	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.210	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	JBQ	0.187	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.354	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.198	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.152	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.212	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.227	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.250	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0323	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0585	1.07	PQL	ng/Kg	
	OCDF	JB	2.30	10.7	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-032-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.76	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.207	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.106	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.244	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.399	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.185	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.306	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.186	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0889	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.153	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.305	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.209	5.42	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0314	1.08	PQL	ng/Kg	
	OCDF	JB	3.05	10.8	PQL	ng/Kg	
SL-038-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.76	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.239	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.133	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.181	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.419	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.170	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.302	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.163	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.144	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.165	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.267	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.213	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0293	1.10	PQL	ng/Kg	
	OCDF	JB	3.09	11.0	PQL	ng/Kg	
SL-039-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.22	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.317	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0863	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.327	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.368	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.265	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.301	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.233	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0812	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.129	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.521	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.303	5.46	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0596	1.09	PQL	ng/Kg	
	OCDF	JB	3.05	10.9	PQL	ng/Kg	
SL-230-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.22	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.02	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.904	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.42	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.27	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.24	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.346	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.18	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.315	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.65	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.600	5.56	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.200	1.11	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-231-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.575	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.475	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.495	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.38	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.354	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.10	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.210	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.300	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.117	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.564	5.22	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.288	5.22	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0294	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0427	1.04	PQL	ng/Kg	
SL-280-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.05	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.289	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.142	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.318	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.685	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.274	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.378	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.199	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.138	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.136	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.483	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.266	5.46	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0449	1.09	PQL	ng/Kg	
	OCDF	JB	4.77	10.9	PQL	ng/Kg	
SL-281-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.61	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.306	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.170	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.254	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.412	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.217	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.285	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.167	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.181	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.239	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.344	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.516	5.55	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0842	1.11	PQL	ng/Kg	
	OCDF	JB	4.58	11.1	PQL	ng/Kg	
SL-282-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.16	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.264	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0574	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.266	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.344	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.265	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.341	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.261	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.159	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.390	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.285	5.41	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0479	1.08	PQL	ng/Kg	
	OCDF	JB	3.76	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX015 **Laboratory:** LL

EDD Filename: DX015_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-283-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.22	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.290	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.126	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.196	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.495	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.187	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.382	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.147	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0900	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.105	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.336	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.192	5.46	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0401	1.09	PQL	ng/Kg	
	OCDF	JB	5.04	10.9	PQL	ng/Kg	
SL-292-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.17	5.33	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.68	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.03	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.42	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.39	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.790	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.798	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.356	5.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.65	5.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.623	5.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0537	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0795	1.07	PQL	ng/Kg	
SL-293-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.819	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	0.724	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.686	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.60	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.470	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.60	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.325	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.400	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.175	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.736	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.261	5.59	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0280	1.12	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0582	1.12	PQL	ng/Kg	
SL-295-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.66	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.245	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0838	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.232	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.384	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.222	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.352	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.229	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0765	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.135	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.358	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.212	5.49	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0530	1.10	PQL	ng/Kg	
	OCDF	JB	2.11	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX015 **Laboratory: LL**

EDD Filename: DX015_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-296-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.24	5.45	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.193	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0563	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.168	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.239	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.139	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.231	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.169	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.104	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.101	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.218	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.138	5.45	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0303	1.09	PQL	ng/Kg	
	OCDF	JB	2.13	10.9	PQL	ng/Kg	
SL-297-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.45	5.57	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.428	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.250	5.57	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.401	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.689	5.57	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.391	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.496	5.57	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.313	5.57	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.317	5.57	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.261	5.57	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.641	5.57	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.397	5.57	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0905	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0890	1.11	PQL	ng/Kg	
	OCDF	JB	5.29	11.1	PQL	ng/Kg	
SL-308-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.56	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.255	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.119	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.210	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.299	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.199	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.337	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.275	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.195	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.211	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.296	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.237	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0507	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0578	1.09	PQL	ng/Kg	
	OCDF	JB	3.01	10.9	PQL	ng/Kg	

LDC #: 25757 AE1

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: AL
2nd Reviewer: VC

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

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	Compound	Finding	Associated Samples	Qualifications
		OCDD	> calibration range	SL-292-SA5B-SS-0.0-0.5	J det | P

Comments: See sample calculation verification worksheet for recalculations

SAMPLE DELIVERY GROUP

DX016

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-Dec-2010	SL-307-SA5B-SS-0.0-0.5	6162837	N	METHOD	1613B	III
08-Dec-2010	SL-294-SA5B-SS-0.0-0.5	6162836	N	METHOD	1613B	III
08-Dec-2010	SL-031-SA5B-SS-0.0-0.5	6162835	N	METHOD	1613B	III
08-Dec-2010	DUP01-SA5B-QC-120810	6162838	FD	METHOD	1613B	III
08-Dec-2010	SL-022-SA5B-SS-0.0-0.5	6162834	N	METHOD	1613B	III
09-Dec-2010	SL-020-SA5B-SS-0.0-0.5	6162849	N	METHOD	1613B	III
09-Dec-2010	SL-018-SA5B-SS-0.0-0.5	6162848	N	METHOD	1613B	III
09-Dec-2010	SL-011-SA5B-SS-0.0-0.5	6162839	N	METHOD	1613B	III
09-Dec-2010	SL-014-SA5B-SS-0.0-0.5	6162840	N	METHOD	1613B	III
09-Dec-2010	SL-306-SA5B-SS-0.0-0.5	6162850	N	METHOD	1613B	III
09-Dec-2010	SL-001-SA5B-SS-0.0-0.5	6162841	N	METHOD	1613B	III
09-Dec-2010	SL-010-SA5B-SS-0.0-0.5	6162843	N	METHOD	1613B	III
09-Dec-2010	SL-006-SA5B-SS-0.0-0.5	6162842	N	METHOD	1613B	III
09-Dec-2010	SL-012-SA5B-SS-0.0-0.5	6162844	N	METHOD	1613B	III
09-Dec-2010	SL-012-SA5B-SS-0.0-0.5MS	6162845	MS	METHOD	1613B	III
09-Dec-2010	SL-012-SA5B-SS-0.0-0.5MSD	6162846	MSD	METHOD	1613B	III
09-Dec-2010	DUP02-SA5B-QC-120910	6162851	FD	METHOD	1613B	III
09-Dec-2010	SL-013-SA5B-SS-0.0-0.5	6162847	N	METHOD	1613B	III
09-Dec-2010	SL-291-SA5B-SS-0.0-0.5	6162852	N	METHOD	1613B	III
09-Dec-2010	SL-002-SA5B-SS-0.0-0.5	6162853	N	METHOD	1613B	III
09-Dec-2010	SL-007-SA5B-SS-0.0-0.5	6162854	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: DX016 **Laboratory:** LL

EDD Filename: DX016_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP01-SA5B-QC-120810 *Collected:* 12/8/2010 3:32:00 *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	1.80	JB	0.0156	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.149	JB	0.0222	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0716	JB	0.0338	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.160	JBQ	0.0238	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.473	JB	0.0345	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.164	JBQ	0.0222	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.400	JB	0.0340	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.130	JBQ	0.0278	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0698	JB	0.0234	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.102	JB	0.0140	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.196	JB	0.0234	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.138	JBQ	0.0133	MDL	5.45	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0179	JBQ	0.0117	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0631	JBQ	0.0227	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	3.90	JB	0.0239	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: DUP02-SA5B-QC-120910 *Collected:* 12/9/2010 12:50:00 *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	4.63	JB	0.0213	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.288	JB	0.0296	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.422	JB	0.0383	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.214	JB	0.0307	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.12	JB	0.0402	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.308	JB	0.0295	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.00	JB	0.0400	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.102	JBQ	0.0382	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.288	JBQ	0.0298	MDL	5.37	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0991	JB	0.0155	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.380	JBQ	0.0293	MDL	5.37	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.168	JB	0.0146	MDL	5.37	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0550	JBQ	0.0151	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0287	JBQ	0.0224	MDL	1.07	PQL	ng/Kg	J	Z
OCDF	9.45	JB	0.0358	MDL	10.7	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-001-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 9:53:00 *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	3.17	JB	0.0200	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.314	JB	0.0276	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.231	JB	0.0450	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.224	JB	0.0323	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.695	JB	0.0445	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.204	JBQ	0.0286	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.544	JBQ	0.0451	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.152	JBQ	0.0316	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.159	JB	0.0212	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.107	JB	0.0141	MDL	5.32	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.274	JBQ	0.0310	MDL	5.32	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.179	JB	0.0140	MDL	5.32	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0569	JBQ	0.0139	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0416	JBQ	0.0203	MDL	1.06	PQL	ng/Kg	J	Z
OCDF	6.54	JB	0.0233	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-002-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,6,7,8-HPCDF	5.04	JB	0.0386	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.502	JB	0.0562	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.477	JBQ	0.0543	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.294	JBQ	0.0447	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.10	JB	0.0535	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.348	JB	0.0454	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.997	JB	0.0544	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.179	JB	0.0557	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.299	JB	0.0347	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.146	JB	0.0220	MDL	5.27	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.442	JBQ	0.0446	MDL	5.27	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.173	JB	0.0219	MDL	5.27	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0559	JBQ	0.0196	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0441	JB	0.0238	MDL	1.05	PQL	ng/Kg	J	Z
OCDF	9.92	JB	0.0619	MDL	10.5	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-006-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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-HPCDF	4.58	JB	0.0433	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.366	JBQ	0.0622	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.584	JBQ	0.102	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.208	JB	0.0543	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.961	JBQ	0.100	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.385	JB	0.0503	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.962	JB	0.112	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.139	JBQ	0.0675	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.354	JBQ	0.0447	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0934	JBQ	0.0260	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.419	JBQ	0.0554	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.172	JBQ	0.0258	MDL	5.42	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0363	JBQ	0.0284	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: SL-007-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,7,8,9-HPCDF	0.513	JB	0.0396	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.752	JB	0.0442	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.350	JB	0.0351	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.78	JB	0.0446	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.483	JB	0.0339	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.02	JB	0.0452	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.164	JB	0.0412	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.502	JBQ	0.0328	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.128	JB	0.0168	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.645	JB	0.0347	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.201	JB	0.0158	MDL	5.36	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0684	JB	0.0152	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: SL-010-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 12:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	5.39	JB	0.0913	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	4.69	JB	0.0705	MDL	5.51	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory:** LL

EDD Filename: DX016_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-010-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 12:35:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	3.90	JB	0.0667	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.13	JB	0.0625	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.44	JB	0.0698	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.47	JB	0.0762	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.657	JB	0.0333	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	3.77	JB	0.0653	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.14	JB	0.0321	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.251	JB	0.0256	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.124	JB	0.0453	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	6840	EB	0.263	MDL	11.0	PQL	ng/Kg	J	*XI

Sample ID: SL-011-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,7,8,9-HPCDF	0.540	JB	0.0412	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.640	JB	0.0448	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.470	JB	0.0373	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.77	JB	0.0452	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.409	JB	0.0374	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.31	JB	0.0433	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.203	JBQ	0.0401	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.487	JB	0.0369	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.192	JBQ	0.0199	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.565	JB	0.0368	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.296	JB	0.0198	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0510	JBQ	0.0163	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0658	JBQ	0.0272	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-012-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 12:47:00 *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	5.36	JB	0.0313	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.372	JBQ	0.0467	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.537	JB	0.0421	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.227	JB	0.0350	MDL	5.46	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-012-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 12:47:00 *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	1.27	JB	0.0440	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.307	JB	0.0326	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.23	JB	0.0437	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.113	JB	0.0419	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.295	JBQ	0.0290	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0808	JBQ	0.0193	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.445	JB	0.0352	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.171	JB	0.0176	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0450	JBQ	0.0161	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0340	JBQ	0.0212	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-013-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 1:07:00 *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	1.06	JB	0.162	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.09	JB	0.0477	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	2.52	JB	0.0435	MDL	5.42	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.766	JB	0.0419	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.267	JBQ	0.0844	MDL	1.08	PQL	ng/Kg	J	Z
OCDD	15100	EB	1.04	MDL	10.8	PQL	ng/Kg	J	*XI

Sample ID: SL-014-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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	1.34	JB	0.0179	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.142	JB	0.0294	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0779	JB	0.0324	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.195	JB	0.0280	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.210	JB	0.0333	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.162	JB	0.0253	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.179	JBQ	0.0319	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0995	JBQ	0.0322	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.101	JBQ	0.0208	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.162	JBQ	0.0150	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.226	JB	0.0274	MDL	5.56	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-014-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
2,3,4,7,8-PECDF	0.186	JB	0.0146	MDL	5.56	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0274	JBQ	0.0159	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0468	JBQ	0.0193	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	2.28	JB	0.0330	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-018-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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-HPCDF	0.892	JB	0.0416	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.102	JBQ	0.0647	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.112	JB	0.0407	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0848	JBQ	0.0339	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.215	JBQ	0.0400	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0953	JBQ	0.0320	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.227	JB	0.0437	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.114	JB	0.0394	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0635	JBQ	0.0272	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0735	JBQ	0.0157	MDL	5.50	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.122	JBQ	0.0321	MDL	5.50	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.111	JBQ	0.0149	MDL	5.50	PQL	ng/Kg	J	Z
OCDF	2.11	JB	0.0909	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-020-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,6,7,8-HPCDF	4.12	JB	0.0631	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.351	JB	0.0776	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.428	JBQ	0.0722	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.230	JBQ	0.0584	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.03	JB	0.0695	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.230	JB	0.0529	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.898	JB	0.0641	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.178	JB	0.0591	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.268	JB	0.0412	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.106	JB	0.0231	MDL	5.46	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-020-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
2,3,4,6,7,8-HXCDF	0.330	JB	0.0529	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.127	JBQ	0.0242	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0265	JBQ	0.0239	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0460	JBQ	0.0260	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-022-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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	2.06	JB	0.0225	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.188	JBQ	0.0304	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.186	JB	0.0462	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.174	JBQ	0.0334	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.515	JB	0.0488	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.159	JBQ	0.0306	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.371	JB	0.0472	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.143	JB	0.0356	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0944	JBQ	0.0248	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.162	JB	0.0204	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.220	JB	0.0327	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.197	JBQ	0.0189	MDL	5.47	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0402	JBQ	0.0163	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	4.74	JB	0.0293	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-031-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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-HPCDF	1.74	JB	0.0244	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.211	JB	0.0361	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0580	JBQ	0.0358	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.172	JBQ	0.0337	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.329	JB	0.0359	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.151	JB	0.0301	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.248	JBQ	0.0371	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.158	JBQ	0.0374	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0807	JBQ	0.0195	MDL	5.44	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory:** LL

EDD Filename: DX016_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-031-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
1,2,3,7,8-PECDF	0.104	JB	0.0144	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.232	JB	0.0326	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.169	JB	0.0138	MDL	5.44	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0462	JBQ	0.0136	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0280	JBQ	0.0187	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	2.96	JB	0.0317	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-291-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 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
1,2,3,4,7,8,9-HPCDF	2.41	JB	0.0732	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	3.84	JB	0.0555	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.55	JB	0.0642	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.99	JB	0.0626	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.409	JBQ	0.0725	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	2.14	JB	0.0725	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.430	JBQ	0.0307	MDL	5.32	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.95	JB	0.0621	MDL	5.32	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.747	JB	0.0298	MDL	5.32	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.179	JB	0.0252	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.141	JBQ	0.0459	MDL	1.06	PQL	ng/Kg	J	Z

Sample ID: SL-294-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:47:00 *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	2.04	JB	0.0201	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.172	JB	0.0302	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.153	JB	0.0444	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.165	JB	0.0335	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.468	JBQ	0.0440	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.136	JBQ	0.0305	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.419	JB	0.0435	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.136	JBQ	0.0364	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.159	JBQ	0.0281	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0523	JBQ	0.0167	MDL	5.42	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory:** LL

EDD Filename: DX016_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-294-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:47:00 *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	0.244	JB	0.0332	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.163	JBQ	0.0159	MDL	5.42	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0306	JBQ	0.0162	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0293	JBQ	0.0206	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	3.76	JB	0.0318	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-306-SA5B-SS-0.0-0.5 *Collected:* 12/9/2010 9:27:00 *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-HPCDF	3.48	JB	0.0234	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.255	JB	0.0303	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.277	JB	0.0380	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.228	JB	0.0287	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.924	JBQ	0.0401	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.228	JBQ	0.0260	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.747	JB	0.0395	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.157	JBQ	0.0329	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.231	JBQ	0.0270	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.135	JB	0.0162	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.279	JB	0.0282	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.206	JB	0.0151	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0667	JBQ	0.0146	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0361	JB	0.0233	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	8.93	JB	0.0251	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-307-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:15:00 *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	0.0288	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0935	JBQ	0.0451	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.0494	JBQ	0.0324	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.127	JB	0.0342	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.200	JB	0.0337	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.143	JBQ	0.0303	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.145	JBQ	0.0326	MDL	5.47	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Data Qualifier Summary

Lab Reporting Batch ID: DX016 Laboratory: LL

EDD Filename: DX016_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-307-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:15:00 *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	0.138	JBQ	0.0433	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0680	JBQ	0.0271	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0852	JB	0.0198	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.205	JB	0.0344	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.117	JB	0.0199	MDL	5.47	PQL	ng/Kg	J	Z
OCDF	1.91	JB	0.0484	MDL	10.9	PQL	ng/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_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
*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	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

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
Q	Matrix Spike Upper Rejection
R	Continuing Calibration Verification Percent Recovery Lower Estimation

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

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

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX016

Method Blank Outlier Report

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371809	12/22/2010 6:09:00 PM	1,2,3,4,6,7,8-HPCDF	0.382 ng/Kg	DUP01-SA5B-QC-120810 DUP02-SA5B-QC-120910 SL-001-SA5B-SS-0.0-0.5 SL-002-SA5B-SS-0.0-0.5 SL-006-SA5B-SS-0.0-0.5 SL-007-SA5B-SS-0.0-0.5 SL-010-SA5B-SS-0.0-0.5 SL-011-SA5B-SS-0.0-0.5 SL-012-SA5B-SS-0.0-0.5 SL-013-SA5B-SS-0.0-0.5 SL-014-SA5B-SS-0.0-0.5 SL-018-SA5B-SS-0.0-0.5 SL-020-SA5B-SS-0.0-0.5 SL-022-SA5B-SS-0.0-0.5 SL-031-SA5B-SS-0.0-0.5 SL-291-SA5B-SS-0.0-0.5 SL-294-SA5B-SS-0.0-0.5 SL-306-SA5B-SS-0.0-0.5 SL-307-SA5B-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-SA5B-QC-120810(RES)	1,2,3,4,6,7,8-HPCDF	1.80 ng/Kg	1.80U ng/Kg
SL-014-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.34 ng/Kg	1.34U ng/Kg
SL-018-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.892 ng/Kg	0.892U ng/Kg
SL-031-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.74 ng/Kg	1.74U ng/Kg
SL-307-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.08 ng/Kg	1.08U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX016 Laboratory: LL

EDD Filename: DX016_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-012-SA5B-SS-0.0-0.5	DUP02-SA5B-QC-120910			
MOISTURE	8.5	6.9	21		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-012-SA5B-SS-0.0-0.5	DUP02-SA5B-QC-120910			
1,2,3,4,6,7,8-HPCDD	34.6	26.8	25	50.00	
1,2,3,4,6,7,8-HPCDF	5.36	4.63	15	50.00	
1,2,3,4,7,8,9-HPCDF	0.372	0.288	25	50.00	
1,2,3,4,7,8-HxCDD	0.537	0.422	24	50.00	
1,2,3,4,7,8-HXCDF	0.227	0.214	6	50.00	
1,2,3,6,7,8-HXCDD	1.27	1.12	13	50.00	
1,2,3,6,7,8-HXCDF	0.307	0.308	0	50.00	
1,2,3,7,8,9-HXCDD	1.23	1.00	21	50.00	
1,2,3,7,8,9-HXCDF	0.113	0.102	10	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	0.295	0.288	2	50.00	
1,2,3,7,8-PECDF	0.0808	0.0991	20	50.00	
2,3,4,6,7,8-HXCDF	0.445	0.380	16	50.00	
2,3,4,7,8-PECDF	0.171	0.168	2	50.00	
2,3,7,8-TCDD	0.0450	0.0550	20	50.00	
2,3,7,8-TCDF	0.0340	0.0287	17	50.00	
OCDD	494	298	49	50.00	
OCDF	12.4	9.45	27	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SA5B-QC-120810	1,2,3,4,6,7,8-HPCDF	JB	1.80	5.45	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.149	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0716	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.160	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.473	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.164	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.400	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.130	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0698	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.102	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.196	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.138	5.45	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0179	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0631	1.09	PQL	ng/Kg	
	OCDF	JB	3.90	10.9	PQL	ng/Kg	
DUP02-SA5B-QC-120910	1,2,3,4,6,7,8-HPCDF	JB	4.63	5.37	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.288	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.422	5.37	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.214	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.12	5.37	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.308	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.00	5.37	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.102	5.37	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.288	5.37	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0991	5.37	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.380	5.37	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.168	5.37	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0550	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0287	1.07	PQL	ng/Kg	
	OCDF	JB	9.45	10.7	PQL	ng/Kg	
SL-001-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.17	5.32	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.314	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.231	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.224	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.695	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.204	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.544	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.152	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.159	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.107	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.274	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.179	5.32	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0569	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0416	1.06	PQL	ng/Kg	
	OCDF	JB	6.54	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.04	5.27	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.502	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.477	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.294	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.10	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.348	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.997	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.179	5.27	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.299	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.146	5.27	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.442	5.27	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.173	5.27	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0559	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0441	1.05	PQL	ng/Kg	
	OCDF	JB	9.92	10.5	PQL	ng/Kg	
SL-006-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.58	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.366	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.584	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.208	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.961	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.385	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.962	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.139	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.354	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0934	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.419	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.172	5.42	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0363	1.08	PQL	ng/Kg	
SL-007-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.513	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.752	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.350	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.78	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.483	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.02	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.164	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.502	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.128	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.645	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.201	5.36	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0684	1.07	PQL	ng/Kg	
SL-010-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	5.39	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	4.69	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.90	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.13	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.44	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.47	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.657	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	3.77	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.14	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.251	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.124	1.10	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.540	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.640	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.470	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.77	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.409	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.31	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.203	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.487	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.192	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.565	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.296	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0510	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0658	1.09	PQL	ng/Kg	
SL-012-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.36	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.372	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.537	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.227	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.27	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.307	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.23	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.113	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.295	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0808	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.445	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.171	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0450	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0340	1.09	PQL	ng/Kg	
SL-013-SA5B-SS-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	1.06	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.09	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.52	5.42	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDD	JB	0.766	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.267	1.08	PQL	ng/Kg	
SL-014-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.34	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.142	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0779	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.195	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.210	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.162	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.179	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0995	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.101	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.162	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.226	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.186	5.56	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0274	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0468	1.11	PQL	ng/Kg	
	OCDF	JB	2.28	11.1	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-018-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.892	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.102	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.112	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0848	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.215	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0953	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.227	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.114	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0635	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0735	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.122	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.111	5.50	PQL	ng/Kg	
	OCDF	JB	2.11	11.0	PQL	ng/Kg	
SL-020-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.12	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.351	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.428	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.230	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.03	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.230	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.898	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.178	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.268	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.106	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.330	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.127	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0265	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0460	1.09	PQL	ng/Kg	
SL-022-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.06	5.47	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.188	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.186	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.174	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.515	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.159	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.371	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.143	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0944	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.162	5.47	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.220	5.47	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.197	5.47	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0402	1.09	PQL	ng/Kg	
	OCDF	JB	4.74	10.9	PQL	ng/Kg	
SL-031-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.74	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.211	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0580	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.172	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.329	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.151	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.248	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.158	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0807	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.104	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.232	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.169	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0462	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0280	1.09	PQL	ng/Kg	
	OCDF	JB	2.96	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX016 **Laboratory: LL**

EDD Filename: DX016_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-291-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.41	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	3.84	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.55	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.99	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.409	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	2.14	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.430	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.95	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.747	5.32	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.179	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.141	1.06	PQL	ng/Kg	
SL-294-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.04	5.42	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.172	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.153	5.42	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.165	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.468	5.42	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.136	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.419	5.42	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.136	5.42	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.159	5.42	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0523	5.42	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.244	5.42	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.163	5.42	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0306	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0293	1.08	PQL	ng/Kg	
	OCDF	JB	3.76	10.8	PQL	ng/Kg	
SL-306-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.48	5.51	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.255	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.277	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.228	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.924	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.228	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.747	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.157	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.231	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.135	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.279	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.206	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0667	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0361	1.10	PQL	ng/Kg	
	OCDF	JB	8.93	11.0	PQL	ng/Kg	
SL-307-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.08	5.47	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0935	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0494	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.127	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.200	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.143	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.145	5.47	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.138	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0680	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0852	5.47	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.205	5.47	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.117	5.47	PQL	ng/Kg	
	OCDF	JB	1.91	10.9	PQL	ng/Kg	

LDC #: 25737B2-1

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: A
2nd Reviewer: W

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

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	Compound	Finding	Associated Samples	Qualifications
		OCDD	> calibration range	SL-010-SA58-55.0.0.5	J det (P
		↓	↓	↓-013- ↓ ↓	↓

Comments: See sample calculation verification worksheet for recalculations

SAMPLE DELIVERY GROUP

DX017

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-Dec-2010	SL-020-SA5C-SB-4.0-5.0	6162883	N	METHOD	1613B	IV
08-Dec-2010	SL-020-SA5C-SB-7.5-8.5	6162884	N	METHOD	1613B	IV
08-Dec-2010	SL-021-SA5C-SB-4.0-5.0	6162887	N	METHOD	1613B	IV
08-Dec-2010	SL-021-SA5C-SB-9.0-10.0	6162888	N	METHOD	1613B	IV
08-Dec-2010	SL-034-SA5B-SS-0.0-0.5	6162894	N	METHOD	1613B	IV
08-Dec-2010	SL-036-SA5B-SS-0.0-0.5	6162896	N	METHOD	1613B	IV
08-Dec-2010	SL-035-SA5B-SS-0.0-0.5	6162895	N	METHOD	1613B	IV
08-Dec-2010	SL-029-SA5B-SS-0.0-0.5	6162893	N	METHOD	1613B	IV
08-Dec-2010	SL-015-SA5C-SB-4.0-5.0	6162881	N	METHOD	1613B	IV
08-Dec-2010	SL-015-SA5C-SB-9.0-10.0	6162882	N	METHOD	1613B	IV
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5	6162889	N	METHOD	1613B	IV
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MS	6162890	MS	METHOD	1613B	IV
08-Dec-2010	SL-017-SA5B-SS-0.0-0.5MSD	6162891	MSD	METHOD	1613B	IV
08-Dec-2010	SL-016-SA5C-SB-4.0-5.0	6162885	N	METHOD	1613B	IV
08-Dec-2010	SL-016-SA5C-SB-9.0-10.0	6162886	N	METHOD	1613B	IV
09-Dec-2010	SL-022-SA5C-SB-4.0-5.0	6162897	N	METHOD	1613B	IV
09-Dec-2010	SL-022-SA5C-SB-9.0-10.0	6162898	N	METHOD	1613B	IV
09-Dec-2010	EB01-SA5B-120910	6162892	EB	METHOD	1613B	IV
09-Dec-2010	SL-012-SA5C-SB-4.0-5.0	6162899	N	METHOD	1613B	IV
09-Dec-2010	SL-012-SA5C-SB-9.0-10.0	6162900	N	METHOD	1613B	IV
09-Dec-2010	SL-013-SA5C-SB-4.0-5.0	6162901	N	METHOD	1613B	IV
09-Dec-2010	SL-013-SA5C-SB-9.0-10.0	6162902	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: DX017

Laboratory: LL

EDD Filename: DX017_v1.

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 1613B **Matrix:** AQ

Sample ID: EB01-SA5B-120910 **Collected:** 12/9/2010 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	2.49	JB	0.271	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	4.77	JB	0.153	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.658	JB	0.192	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.249	JBQ	0.169	MDL	10.4	PQL	pg/L	U	B
1,2,3,4,7,8-HXCDF	0.739	JBQ	0.170	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	0.325	JBQ	0.166	MDL	10.4	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDF	0.722	JB	0.167	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.271	JB	0.171	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDF	0.502	JB	0.179	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDD	0.366	JBQ	0.218	MDL	10.4	PQL	pg/L	U	B
1,2,3,7,8-PECDF	0.271	JBQ	0.132	MDL	10.4	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.12	JB	0.162	MDL	10.4	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.665	JBQ	0.118	MDL	10.4	PQL	pg/L	U	B
2,3,7,8-TCDD	0.478	JQ	0.237	MDL	2.07	PQL	pg/L	J	Z
2,3,7,8-TCDF	0.160	JBQ	0.149	MDL	2.07	PQL	pg/L	U	B
OCDD	2.77	JB	0.295	MDL	20.7	PQL	pg/L	U	B
OCDF	2.78	JB	0.248	MDL	20.7	PQL	pg/L	U	B

Method Category: SVOA **Method:** 1613B **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 **Collected:** 12/9/2010 1:05:00 **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	1.25	JB	0.00733	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.100	JB	0.0103	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0935	J	0.0118	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.107	JBQ	0.00933	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.324	JB	0.0121	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.147	JB	0.00911	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.344	JB	0.0122	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.159	JBQ	0.0103	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.136	JBQ	0.0141	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.168	JBQ	0.00744	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.172	JB	0.00878	MDL	5.56	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX017 Laboratory: LL

EDD Filename: DX017_v1. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,4,7,8-PECDF	0.198	JB	0.00611	MDL	5.56	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0617	JBQ	0.00967	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0793	JQ	0.0109	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	2.35	JB	0.0117	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *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	1.28	JB	0.0191	MDL	6.11	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.479	JB	0.00954	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0514	JBQ	0.0131	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0187	JQ	0.0136	MDL	6.11	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0765	JB	0.0101	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0557	JBQ	0.0142	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0741	JB	0.0116	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0796	JB	0.0143	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0729	JBQ	0.0119	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0399	JBQ	0.0167	MDL	6.11	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0310	JBQ	0.00770	MDL	6.11	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.106	JB	0.00978	MDL	6.11	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0823	JBQ	0.00575	MDL	6.11	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0149	JB	0.0121	MDL	1.22	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0211	JQ	0.0117	MDL	1.22	PQL	ng/Kg	J	Z
OCDF	0.541	JB	0.0164	MDL	12.2	PQL	ng/Kg	U	B

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *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	1.14	JB	0.0155	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.106	JB	0.0221	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0741	JQ	0.0189	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.102	JBQ	0.0132	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.333	JBQ	0.0193	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0794	JBQ	0.0224	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.231	JB	0.0185	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.120	JB	0.0164	MDL	5.48	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory:** LL

EDD Filename: DX017_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-013-SA5C-SB-4.0-5.0 ***Collected:*** 12/9/2010 1:44:00 ***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	0.0628	JB	0.0193	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0686	JBQ	0.0104	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.131	JBQ	0.0133	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.135	JB	0.00735	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0367	J	0.0141	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	2.92	JB	0.0262	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-013-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 1:52:00 ***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	4.43	JB	0.0311	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.541	JBQ	0.0137	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0783	JBQ	0.0192	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0652	JQ	0.0223	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0605	JBQ	0.0173	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.270	JB	0.0221	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.129	JB	0.0155	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.299	JB	0.0235	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.117	JBQ	0.0200	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0663	JBQ	0.0103	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0968	JBQ	0.0160	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0794	JB	0.00954	MDL	5.48	PQL	ng/Kg	U	B
OCDF	1.07	JB	0.0289	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-015-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 2:33:00 ***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	4.95	JB	0.0326	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.66	JB	0.0170	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.169	JBQ	0.0230	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0748	JQ	0.0254	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.194	JB	0.0199	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.261	JB	0.0261	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.182	JB	0.0186	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.330	JB	0.0270	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.252	JBQ	0.0229	MDL	5.52	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory:** LL

EDD Filename: DX017_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-015-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 2:33:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8-PECDD	0.0714	JB	0.0296	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.299	JBQ	0.0130	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.278	JB	0.0188	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.219	JB	0.0128	MDL	5.52	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0448	J	0.0230	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	2.10	JB	0.0286	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 2:40:00 *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	1.45	JB	0.0149	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.210	JBQ	0.0209	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0637	JQ	0.0249	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.170	JBQ	0.0188	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.377	JB	0.0258	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.146	JBQ	0.0166	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.225	JBQ	0.0256	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.143	JB	0.0214	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0791	JBQ	0.0249	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.135	JB	0.0125	MDL	5.44	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.213	JB	0.0180	MDL	5.44	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.128	JB	0.0121	MDL	5.44	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0356	J	0.0236	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	2.45	JB	0.0268	MDL	10.9	PQL	ng/Kg	U	B

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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-HPCDF	1.16	JB	0.0143	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.142	JBQ	0.0180	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.100	JQ	0.0240	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.159	JB	0.0190	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.340	JB	0.0246	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.157	JB	0.0178	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.254	JB	0.0251	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.173	JBQ	0.0219	MDL	5.48	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory:** LL

EDD Filename: DX017_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-016-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 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
1,2,3,7,8-PECDD	0.126	JBQ	0.0237	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.176	JBQ	0.0126	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.219	JB	0.0183	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.175	JB	0.0121	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0322	JB	0.0194	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0445	JQ	0.0219	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	2.07	JB	0.0239	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-016-SA5C-SB-9.0-10.0 ***Collected:*** 12/8/2010 4:23:00 ***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	4.64	JB	0.0334	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.890	JB	0.0111	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.111	JB	0.0165	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0468	JQ	0.0216	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.137	JB	0.0178	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.217	JBQ	0.0223	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.124	JB	0.0162	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.200	JBQ	0.0223	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.151	JBQ	0.0200	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0799	JBQ	0.0249	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.134	JB	0.0118	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.192	JBQ	0.0171	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.132	JB	0.0114	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0242	JBQ	0.0162	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0266	JQ	0.0211	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	1.27	JB	0.0283	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-017-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 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	1.82	JB	0.0214	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.204	JBQ	0.0316	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.127	J	0.0397	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.151	JBQ	0.0251	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.566	JBQ	0.0408	MDL	5.46	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX017 Laboratory: LL

EDD Filename: DX017_v1. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
1,2,3,6,7,8-HXCDF	0.161	JB	0.0225	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.580	JB	0.0396	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.180	JB	0.0278	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.221	JBQ	0.0326	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.149	JB	0.0163	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.195	JB	0.0243	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.170	JB	0.0146	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0244	JBQ	0.0216	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0325	JQ	0.0267	MDL	1.09	PQL	ng/Kg	J	Z
OCDD	176	B	0.0553	MDL	10.9	PQL	ng/Kg	J	Q, Q
OCDF	3.90	JB	0.0343	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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-HPCDD	2.09	JB	0.0291	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.09	JB	0.0162	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.138	JB	0.0239	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0562	J	0.0217	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.180	JBQ	0.0214	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.142	JB	0.0228	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.137	JBQ	0.0186	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.175	JB	0.0218	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.154	JB	0.0247	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0484	JB	0.0248	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0810	JBQ	0.0132	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.285	JB	0.0206	MDL	5.56	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.155	JB	0.0127	MDL	5.56	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0283	J	0.0221	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	0.987	JB	0.0321	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 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-HPCDD	0.285	JBQ	0.0221	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.396	JB	0.0110	MDL	5.48	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX017 Laboratory: LL

EDD Filename: DX017_v1. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 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
1,2,3,4,7,8,9-HPCDF	0.0581	JBQ	0.0175	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0813	JB	0.0160	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0235	JB	0.0157	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0488	JB	0.0136	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0369	JB	0.0154	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0363	JBQ	0.0243	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0230	JBQ	0.00953	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.114	JB	0.0156	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0802	JB	0.00953	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0311	JBQ	0.0203	MDL	1.10	PQL	ng/Kg	U	B
OCDD	0.698	JB	0.0286	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.265	JB	0.0257	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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
1,2,3,4,6,7,8-HPCDF	1.90	JB	0.0299	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.331	JB	0.0416	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.136	J	0.0517	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.247	JB	0.0365	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.491	JB	0.0537	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.246	JB	0.0324	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.352	JBQ	0.0513	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.293	JBQ	0.0416	MDL	5.34	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.185	JB	0.0221	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.302	JB	0.0357	MDL	5.34	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.381	JBQ	0.0216	MDL	5.34	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0685	JQ	0.0379	MDL	1.07	PQL	ng/Kg	J	Z
OCDF	3.49	JB	0.0471	MDL	10.7	PQL	ng/Kg	J	Z

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 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-HPCDF	1.73	JB	0.0201	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.235	JB	0.0341	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.103	JQ	0.0374	MDL	5.46	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX017

Laboratory: LL

EDD Filename: DX017_v1.

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-021-SA5C-SB-9.0-10.0 **Collected:** 12/8/2010 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
1,2,3,4,7,8-HXCDF	0.262	JBQ	0.0301	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.543	JBQ	0.0396	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.187	JB	0.0260	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.304	JBQ	0.0384	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.251	JB	0.0355	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.157	JBQ	0.0366	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.167	JBQ	0.0179	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.205	JBQ	0.0286	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.136	JB	0.0164	MDL	5.46	PQL	ng/Kg	U	B
OCDF	2.98	JB	0.0425	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-022-SA5C-SB-4.0-5.0 **Collected:** 12/9/2010 9:56:00 **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	0.340	JB	0.0157	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.318	JB	0.00911	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0732	JBQ	0.0130	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0371	JQ	0.0135	MDL	5.49	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0984	JB	0.0104	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.103	JB	0.0137	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0784	JB	0.0171	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.131	JBQ	0.0132	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.114	JB	0.0120	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0525	JBQ	0.0128	MDL	5.49	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0712	JB	0.00757	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0971	JBQ	0.00966	MDL	5.49	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.117	JBQ	0.00582	MDL	5.49	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0143	JBQ	0.00867	MDL	1.10	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0303	JQ	0.0108	MDL	1.10	PQL	ng/Kg	J	Z
OCDD	1.95	JB	0.0166	MDL	11.0	PQL	ng/Kg	U	B
OCDF	0.281	JB	0.0131	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-022-SA5C-SB-9.0-10.0 **Collected:** 12/9/2010 10:02:00 **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	0.192	JB	0.0116	MDL	5.74	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory:** LL

EDD Filename: DX017_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-022-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 10:02:00 ***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	0.313	JB	0.00574	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0473	JB	0.00792	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0179	JQ	0.00850	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.0618	JBQ	0.00677	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0356	JB	0.00896	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0529	JBQ	0.00643	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0297	JBQ	0.00896	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0352	JBQ	0.00735	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0187	JBQ	0.00930	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0359	JBQ	0.00459	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0815	JB	0.00631	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0762	JB	0.00390	MDL	5.74	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0162	JBQ	0.00792	MDL	1.15	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0221	JQ	0.00608	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	0.687	JB	0.0140	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.252	JB	0.0104	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-029-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 2:27:00 ***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-HPCDF	3.15	JB	0.0241	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.372	JB	0.0443	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.327	JQ	0.0345	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.221	JB	0.0312	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.832	JB	0.0360	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.310	JB	0.0263	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.961	JBQ	0.0335	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.223	JB	0.0372	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.248	JBQ	0.0408	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.136	JBQ	0.0188	MDL	5.47	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.336	JBQ	0.0309	MDL	5.47	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.163	JBQ	0.0183	MDL	5.47	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0508	JBQ	0.0253	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0335	J	0.0280	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	7.60	JB	0.0508	MDL	10.9	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory:** LL

EDD Filename: DX017_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-034-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 1:25:00 ***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	2.80	JB	0.0219	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.296	JBQ	0.0326	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.253	JQ	0.0405	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.218	JBQ	0.0323	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.874	JB	0.0417	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.238	JB	0.0290	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.684	JBQ	0.0436	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.189	JB	0.0403	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.323	JB	0.0508	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.119	JBQ	0.0195	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.253	JB	0.0313	MDL	5.46	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.123	JBQ	0.0190	MDL	5.46	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0432	JBQ	0.0326	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0978	J	0.0366	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	6.41	JB	0.0435	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-035-SA5B-SS-0.0-0.5 ***Collected:*** 12/8/2010 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	1.29	JB	0.0326	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.201	JBQ	0.0545	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.144	JQ	0.0523	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.134	JBQ	0.0360	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.351	JB	0.0552	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0990	JB	0.0306	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.226	JBQ	0.0541	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.124	JB	0.0424	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	JBQ	0.0715	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.110	JBQ	0.0243	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.145	JBQ	0.0335	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.210	JBQ	0.0242	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0532	JQ	0.0364	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	2.91	JB	0.0678	MDL	11.1	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX017 Laboratory: LL

EDD Filename: DX017_v1. eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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-HPCDF	2.21	JB	0.0207	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.221	JBQ	0.0272	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.287	J	0.0361	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.194	JBQ	0.0260	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.793	JB	0.0368	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.197	JBQ	0.0228	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.651	JB	0.0343	MDL	5.53	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.137	JBQ	0.0275	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.291	JBQ	0.0412	MDL	5.53	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.154	JB	0.0152	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.228	JB	0.0244	MDL	5.53	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.185	JBQ	0.0147	MDL	5.53	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0545	JBQ	0.0210	MDL	1.11	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0659	JQ	0.0282	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	5.23	JB	0.0301	MDL	11.1	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX017

Method Blank Outlier Report

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB370558	12/21/2010 5:58:00 AM	1,2,3,4,6,7,8-HPCDD	3.15 pg/L	EB01-SA5B-120910
		1,2,3,4,6,7,8-HPCDF	5.79 pg/L	
		1,2,3,4,7,8,9-HPCDF	2.97 pg/L	
		1,2,3,4,7,8-HxCDD	1.17 pg/L	
		1,2,3,4,7,8-HXCDF	1.35 pg/L	
		1,2,3,6,7,8-HXCDD	0.874 pg/L	
		1,2,3,6,7,8-HXCDF	1.31 pg/L	
		1,2,3,7,8,9-HXCDD	1.40 pg/L	
		1,2,3,7,8,9-HXCDF	1.86 pg/L	
		1,2,3,7,8-PECDD	1.56 pg/L	
		1,2,3,7,8-PECDF	1.22 pg/L	
		2,3,4,6,7,8-HXCDF	1.72 pg/L	
		2,3,4,7,8-PECDF	1.70 pg/L	
		2,3,7,8-TCDF	0.414 pg/L	
		OCDD	6.75 pg/L	
		OCDF	3.65 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
EB01-SA5B-120910(RES)	1,2,3,4,6,7,8-HPCDD	2.49 pg/L	2.49U pg/L
EB01-SA5B-120910(RES)	1,2,3,4,6,7,8-HPCDF	4.77 pg/L	4.77U pg/L
EB01-SA5B-120910(RES)	1,2,3,4,7,8,9-HPCDF	0.658 pg/L	0.658U pg/L
EB01-SA5B-120910(RES)	1,2,3,4,7,8-HxCDD	0.249 pg/L	0.249U pg/L
EB01-SA5B-120910(RES)	1,2,3,4,7,8-HXCDF	0.739 pg/L	0.739U pg/L
EB01-SA5B-120910(RES)	1,2,3,6,7,8-HXCDD	0.325 pg/L	0.325U pg/L
EB01-SA5B-120910(RES)	1,2,3,6,7,8-HXCDF	0.722 pg/L	0.722U pg/L
EB01-SA5B-120910(RES)	1,2,3,7,8,9-HXCDD	0.271 pg/L	0.271U pg/L
EB01-SA5B-120910(RES)	1,2,3,7,8,9-HXCDF	0.502 pg/L	0.502U pg/L
EB01-SA5B-120910(RES)	1,2,3,7,8-PECDD	0.366 pg/L	0.366U pg/L
EB01-SA5B-120910(RES)	1,2,3,7,8-PECDF	0.271 pg/L	0.271U pg/L
EB01-SA5B-120910(RES)	2,3,4,6,7,8-HXCDF	1.12 pg/L	1.12U pg/L
EB01-SA5B-120910(RES)	2,3,4,7,8-PECDF	0.665 pg/L	0.665U pg/L
EB01-SA5B-120910(RES)	2,3,7,8-TCDF	0.160 pg/L	0.160U pg/L
EB01-SA5B-120910(RES)	OCDD	2.77 pg/L	2.77U pg/L
EB01-SA5B-120910(RES)	OCDF	2.78 pg/L	2.78U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX017

Laboratory: LL

EDD Filename: DX017_v1.

eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371415	12/28/2010 2:15:00 PM	1,2,3,4,6,7,8-HPCDD	0.222 ng/Kg	SL-012-SA5C-SB-4.0-5.0
		1,2,3,4,6,7,8-HPCDF	0.598 ng/Kg	SL-012-SA5C-SB-9.0-10.0
		1,2,3,4,7,8,9-HPCDF	0.177 ng/Kg	SL-013-SA5C-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.228 ng/Kg	SL-013-SA5C-SB-9.0-10.0
		1,2,3,6,7,8-HXCDD	0.0718 ng/Kg	SL-015-SA5C-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.137 ng/Kg	SL-015-SA5C-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.116 ng/Kg	SL-016-SA5C-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.279 ng/Kg	SL-016-SA5C-SB-9.0-10.0
		1,2,3,7,8-PECDD	0.0795 ng/Kg	SL-017-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.111 ng/Kg	SL-020-SA5C-SB-4.0-5.0
		2,3,4,6,7,8-HXCDF	0.279 ng/Kg	SL-020-SA5C-SB-7.5-8.5
		2,3,4,7,8-PECDF	0.156 ng/Kg	SL-021-SA5C-SB-4.0-5.0
		2,3,7,8-TCDD	0.0474 ng/Kg	SL-021-SA5C-SB-9.0-10.0
		OCDD	0.397 ng/Kg	SL-022-SA5C-SB-4.0-5.0
		OCDF	0.559 ng/Kg	SL-022-SA5C-SB-9.0-10.0
				SL-029-SA5B-SS-0.0-0.5
				SL-034-SA5B-SS-0.0-0.5
				SL-035-SA5B-SS-0.0-0.5
				SL-036-SA5B-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-SA5C-SB-4.0-5.0(RES)	1,2,3,4,8,7,8-HPCDF	1.25 ng/Kg	1.25U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.100 ng/Kg	0.100U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.107 ng/Kg	0.107U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.324 ng/Kg	0.324U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.147 ng/Kg	0.147U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.344 ng/Kg	0.344U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.159 ng/Kg	0.159U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.136 ng/Kg	0.136U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.168 ng/Kg	0.168U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.172 ng/Kg	0.172U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.198 ng/Kg	0.198U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0617 ng/Kg	0.0617U ng/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	OCDF	2.35 ng/Kg	2.35U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.479 ng/Kg	0.479U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0514 ng/Kg	0.0514U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0765 ng/Kg	0.0765U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0557 ng/Kg	0.0557U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0741 ng/Kg	0.0741U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0796 ng/Kg	0.0796U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0729 ng/Kg	0.0729U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0399 ng/Kg	0.0399U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0310 ng/Kg	0.0310U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.106 ng/Kg	0.106U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0823 ng/Kg	0.0823U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0149 ng/Kg	0.0149U ng/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	OCDF	0.541 ng/Kg	0.541U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.14 ng/Kg	1.14U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_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-013-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.106 ng/Kg	0.106U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.102 ng/Kg	0.102U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.333 ng/Kg	0.333U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0794 ng/Kg	0.0794U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.231 ng/Kg	0.231U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0628 ng/Kg	0.0628U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0686 ng/Kg	0.0686U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.131 ng/Kg	0.131U ng/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.135 ng/Kg	0.135U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.541 ng/Kg	0.541U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0783 ng/Kg	0.0783U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0605 ng/Kg	0.0605U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.270 ng/Kg	0.270U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.129 ng/Kg	0.129U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.299 ng/Kg	0.299U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.117 ng/Kg	0.117U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0663 ng/Kg	0.0663U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0968 ng/Kg	0.0968U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0794 ng/Kg	0.0794U ng/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	OCDF	1.07 ng/Kg	1.07U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.66 ng/Kg	1.68U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.169 ng/Kg	0.169U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.194 ng/Kg	0.194U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.261 ng/Kg	0.261U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.182 ng/Kg	0.182U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.330 ng/Kg	0.330U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.252 ng/Kg	0.252U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0714 ng/Kg	0.0714U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.299 ng/Kg	0.299U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.278 ng/Kg	0.278U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.219 ng/Kg	0.219U ng/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	OCDF	2.10 ng/Kg	2.10U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	1.45 ng/Kg	1.45U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.210 ng/Kg	0.210U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.170 ng/Kg	0.170U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.146 ng/Kg	0.146U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.225 ng/Kg	0.225U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.143 ng/Kg	0.143U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0791 ng/Kg	0.0791U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX017 | Laboratory: LL

EDD Filename: DX017_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-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.135 ng/Kg	0.135U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.213 ng/Kg	0.213U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.128 ng/Kg	0.128U ng/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	OCDF	2.45 ng/Kg	2.45U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.16 ng/Kg	1.16U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.159 ng/Kg	0.159U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.340 ng/Kg	0.340U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.157 ng/Kg	0.157U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.254 ng/Kg	0.254U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.126 ng/Kg	0.126U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.176 ng/Kg	0.176U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.219 ng/Kg	0.219U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.175 ng/Kg	0.175U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0322 ng/Kg	0.0322U ng/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	OCDF	2.07 ng/Kg	2.07U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.890 ng/Kg	0.890U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.111 ng/Kg	0.111U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.137 ng/Kg	0.137U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.217 ng/Kg	0.217U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.124 ng/Kg	0.124U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.200 ng/Kg	0.200U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0799 ng/Kg	0.0799U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.134 ng/Kg	0.134U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.192 ng/Kg	0.192U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.132 ng/Kg	0.132U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0242 ng/Kg	0.0242U ng/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	OCDF	1.27 ng/Kg	1.27U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.82 ng/Kg	1.82U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.204 ng/Kg	0.204U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.580 ng/Kg	0.580U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.180 ng/Kg	0.180U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.221 ng/Kg	0.221U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.149 ng/Kg	0.149U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.195 ng/Kg	0.195U ng/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.170 ng/Kg	0.170U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_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-017-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0244 ng/Kg	0.0244U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.09 ng/Kg	1.09U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.138 ng/Kg	0.138U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.180 ng/Kg	0.180U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.142 ng/Kg	0.142U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.137 ng/Kg	0.137U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.175 ng/Kg	0.175U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.154 ng/Kg	0.154U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0484 ng/Kg	0.0484U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0810 ng/Kg	0.0810U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.285 ng/Kg	0.285U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.155 ng/Kg	0.155U ng/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	OCDF	0.987 ng/Kg	0.987U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDD	0.285 ng/Kg	0.285U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,4,6,7,8-HPCDF	0.396 ng/Kg	0.396U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0581 ng/Kg	0.0581U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,4,7,8-HXCDF	0.0813 ng/Kg	0.0813U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDD	0.0235 ng/Kg	0.0235U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,6,7,8-HXCDF	0.0488 ng/Kg	0.0488U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,7,8,9-HXCDD	0.0369 ng/Kg	0.0369U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,7,8-PECDD	0.0363 ng/Kg	0.0363U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	1,2,3,7,8-PECDF	0.0230 ng/Kg	0.0230U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	2,3,4,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	2,3,4,7,8-PECDF	0.0802 ng/Kg	0.0802U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	2,3,7,8-TCDD	0.0311 ng/Kg	0.0311U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	OCDD	0.698 ng/Kg	0.698U ng/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	OCDF	0.265 ng/Kg	0.265U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	1.90 ng/Kg	1.90U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.331 ng/Kg	0.331U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.247 ng/Kg	0.247U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.246 ng/Kg	0.246U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.352 ng/Kg	0.352U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.293 ng/Kg	0.293U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.185 ng/Kg	0.185U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.302 ng/Kg	0.302U ng/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.381 ng/Kg	0.381U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	1.73 ng/Kg	1.73U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.235 ng/Kg	0.235U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.262 ng/Kg	0.262U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.187 ng/Kg	0.187U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX017

Laboratory: LL

EDD Filename: DX017_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-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.304 ng/Kg	0.304U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.251 ng/Kg	0.251U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.157 ng/Kg	0.157U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.167 ng/Kg	0.167U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.205 ng/Kg	0.205U ng/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.340 ng/Kg	0.340U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.318 ng/Kg	0.318U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0732 ng/Kg	0.0732U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0984 ng/Kg	0.0984U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.103 ng/Kg	0.103U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0784 ng/Kg	0.0784U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDD	0.131 ng/Kg	0.131U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0525 ng/Kg	0.0525U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0712 ng/Kg	0.0712U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0971 ng/Kg	0.0971U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.117 ng/Kg	0.117U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0143 ng/Kg	0.0143U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	OCDD	1.95 ng/Kg	1.95U ng/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	OCDF	0.281 ng/Kg	0.281U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.192 ng/Kg	0.192U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.313 ng/Kg	0.313U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0473 ng/Kg	0.0473U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0618 ng/Kg	0.0618U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0356 ng/Kg	0.0356U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0529 ng/Kg	0.0529U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0297 ng/Kg	0.0297U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0352 ng/Kg	0.0352U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0187 ng/Kg	0.0187U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0359 ng/Kg	0.0359U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0815 ng/Kg	0.0815U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0762 ng/Kg	0.0762U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0162 ng/Kg	0.0162U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	OCDD	0.687 ng/Kg	0.687U ng/Kg
SL-022-SA5C-SB-9.0-10.0(RES)	OCDF	0.252 ng/Kg	0.252U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.372 ng/Kg	0.372U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.221 ng/Kg	0.221U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.310 ng/Kg	0.310U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.223 ng/Kg	0.223U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_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-029-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.248 ng/Kg	0.248U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.336 ng/Kg	0.336U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.163 ng/Kg	0.163U ng/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0508 ng/Kg	0.0508U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.80 ng/Kg	2.80U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.296 ng/Kg	0.296U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.218 ng/Kg	0.218U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.238 ng/Kg	0.238U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.189 ng/Kg	0.189U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.323 ng/Kg	0.323U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.119 ng/Kg	0.119U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.253 ng/Kg	0.253U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.123 ng/Kg	0.123U ng/Kg
SL-034-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0432 ng/Kg	0.0432U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.29 ng/Kg	1.29U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.201 ng/Kg	0.201U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.351 ng/Kg	0.351U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0990 ng/Kg	0.0990U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.226 ng/Kg	0.226U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.124 ng/Kg	0.124U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.158 ng/Kg	0.158U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.110 ng/Kg	0.110U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.145 ng/Kg	0.145U ng/Kg
SL-035-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.210 ng/Kg	0.210U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.21 ng/Kg	2.21U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.221 ng/Kg	0.221U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.194 ng/Kg	0.194U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.197 ng/Kg	0.197U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.137 ng/Kg	0.137U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.291 ng/Kg	0.291U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.154 ng/Kg	0.154U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.228 ng/Kg	0.228U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.185 ng/Kg	0.185U ng/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0545 ng/Kg	0.0545U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_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-017-SA5B-SS-0.0-0.5MS SL-017-SA5B-SS-0.0-0.5MSD (SL-017-SA5B-SS-0.0-0.5)	OCDD	318	-	40.00-135.00	72 (20.00)	OCDD	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DX017 **Laboratory:** LL

EDD Filename: DX017_v1. **eQAPP Name:** CDM_SSFL_110509

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5B-120910	1,2,3,4,6,7,8-HPCDD	JB	2.49	10.4	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	4.77	10.4	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.658	10.4	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JBQ	0.249	10.4	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	0.739	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JBQ	0.325	10.4	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JB	0.722	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.271	10.4	PQL	pg/L	
	1,2,3,7,8,9-HXCDF	JB	0.502	10.4	PQL	pg/L	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.366	10.4	PQL	pg/L	
	1,2,3,7,8-PECDF	JBQ	0.271	10.4	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.12	10.4	PQL	pg/L	
	2,3,4,7,8-PECDF	JBQ	0.665	10.4	PQL	pg/L	
	2,3,7,8-TCDD	JQ	0.478	2.07	PQL	pg/L	
	2,3,7,8-TCDF	JBQ	0.160	2.07	PQL	pg/L	
	OCDD	JB	2.77	20.7	PQL	pg/L	
	OCDF	JB	2.78	20.7	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.25	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.100	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0935	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.107	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.324	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.147	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.344	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.159	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.136	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.168	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.172	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.198	5.56	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0617	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0793	1.11	PQL	ng/Kg	
	OCDF	JB	2.35	11.1	PQL	ng/Kg	
SL-012-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.28	6.11	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.479	6.11	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0514	6.11	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0187	6.11	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0765	6.11	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0557	6.11	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0741	6.11	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0796	6.11	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0729	6.11	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0399	6.11	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0310	6.11	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.106	6.11	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0823	6.11	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0149	1.22	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0211	1.22	PQL	ng/Kg	
	OCDF	JB	0.541	12.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX017 Laboratory: LL

EDD Filename: DX017_v1. eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.14	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.106	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0741	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.102	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.333	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0794	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.231	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.120	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0628	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0686	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.131	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.135	5.48	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0367	1.10	PQL	ng/Kg	
	OCDF	JB	2.92	11.0	PQL	ng/Kg	
SL-013-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	4.43	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.541	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0783	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0652	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0605	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.270	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.129	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.299	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.117	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0663	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0968	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0794	5.48	PQL	ng/Kg	
	OCDF	JB	1.07	11.0	PQL	ng/Kg	
SL-015-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	4.95	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.66	5.52	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.169	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0748	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.194	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.261	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.182	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.330	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.252	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0714	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.299	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.278	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.219	5.52	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0448	1.10	PQL	ng/Kg	
	OCDF	JB	2.10	11.0	PQL	ng/Kg	
SL-015-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.45	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.210	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0637	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.170	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.377	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.146	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.225	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.143	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0791	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.135	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.213	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.128	5.44	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0356	1.09	PQL	ng/Kg	
	OCDF	JB	2.45	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.16	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.142	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.100	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.159	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.340	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.157	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.254	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.173	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.126	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.176	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.219	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.175	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0322	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0445	1.10	PQL	ng/Kg	
	OCDF	JB	2.07	11.0	PQL	ng/Kg	
SL-016-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	4.64	5.50	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.890	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.111	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0468	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.137	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.217	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.124	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.200	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.151	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0799	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.134	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.192	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.132	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0242	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0266	1.10	PQL	ng/Kg	
	OCDF	JB	1.27	11.0	PQL	ng/Kg	
SL-017-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.82	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.204	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.127	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.151	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.566	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.161	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.580	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.180	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.221	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.149	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.195	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.170	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0244	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0325	1.09	PQL	ng/Kg	
	OCDF	JB	3.90	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	2.09	5.56	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	1.09	5.56	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.138	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.0562	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.180	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.142	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.137	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.175	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.154	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0484	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0810	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.285	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.155	5.56	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0283	1.11	PQL	ng/Kg	
	OCDF	JB	0.987	11.1	PQL	ng/Kg	
SL-020-SA5C-SB-7.5-8.5	1,2,3,4,6,7,8-HPCDD	JBQ	0.285	5.48	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.396	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0581	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0813	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0235	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0488	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0369	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0363	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.0230	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.114	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0802	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0311	1.10	PQL	ng/Kg	
	OCDD	JB	0.698	11.0	PQL	ng/Kg	
	OCDF	JB	0.265	11.0	PQL	ng/Kg	
SL-021-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.90	5.34	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.331	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.136	5.34	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.247	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.491	5.34	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.246	5.34	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.352	5.34	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.293	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.185	5.34	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.302	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.381	5.34	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0685	1.07	PQL	ng/Kg	
	OCDF	JB	3.49	10.7	PQL	ng/Kg	
SL-021-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.73	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.235	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.103	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.262	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.543	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.187	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.304	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.251	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.157	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.167	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.205	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.136	5.46	PQL	ng/Kg	
	OCDF	JB	2.98	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-022-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.340	5.49	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.318	5.49	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0732	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0371	5.49	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0984	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.103	5.49	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0784	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.131	5.49	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.114	5.49	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0525	5.49	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0712	5.49	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0971	5.49	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.117	5.49	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0143	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0303	1.10	PQL	ng/Kg	
	OCDD	JB	1.95	11.0	PQL	ng/Kg	
	OCDF	JB	0.281	11.0	PQL	ng/Kg	
SL-022-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.192	5.74	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.313	5.74	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0473	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.0179	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0618	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.0356	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0529	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0297	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.0352	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0187	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0359	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0815	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0762	5.74	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0162	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0221	1.15	PQL	ng/Kg	
	OCDD	JB	0.687	11.5	PQL	ng/Kg	
	OCDF	JB	0.252	11.5	PQL	ng/Kg	
SL-029-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.15	5.47	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.372	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.327	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.221	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.832	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.310	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.961	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.223	5.47	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.248	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.136	5.47	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.336	5.47	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.163	5.47	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0508	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0335	1.09	PQL	ng/Kg	
	OCDF	JB	7.60	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX017 **Laboratory: LL**

EDD Filename: DX017_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-034-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.80	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.296	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.253	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.218	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.874	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.238	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.684	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.189	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.323	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.119	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.253	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.123	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0432	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0978	1.09	PQL	ng/Kg	
	OCDF	JB	6.41	10.9	PQL	ng/Kg	
SL-035-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.29	5.54	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.201	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JQ	0.144	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.134	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.351	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0990	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.226	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.124	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.158	5.54	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.110	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.145	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.210	5.54	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0532	1.11	PQL	ng/Kg	
	OCDF	JB	2.91	11.1	PQL	ng/Kg	
SL-036-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.21	5.53	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.221	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	J	0.287	5.53	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.194	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.793	5.53	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.197	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.651	5.53	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.137	5.53	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.291	5.53	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.154	5.53	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.228	5.53	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.185	5.53	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0545	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0659	1.11	PQL	ng/Kg	
	OCDF	JB	5.23	11.1	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: December 8 through December 9, 2010

LDC Report Date: May 18, 2011

Matrix: Soil/Water

Parameters: Dioxins/Dibenzofurans

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DX017

Sample Identification

SL-015-SA5C-SB-4.0-5.0
SL-015-SA5C-SB-9.0-10.0
SL-020-SA5C-SB-4.0-5.0
SL-020-SA5C-SB-7.5-8.5
SL-016-SA5C-SB-4.0-5.0
SL-016-SA5C-SB-9.0-10.0
SL-021-SA5C-SB-4.0-5.0
SL-021-SA5C-SB-9.0-10.0
SL-017-SA5B-SS-0.0-0.5
EB01-SA5B-120910
SL-029-SA5B-SS-0.0-0.5
SL-034-SA5B-SS-0.0-0.5
SL-035-SA5B-SS-0.0-0.5
SL-036-SA5B-SS-0.0-0.5
SL-022-SA5C-SB-4.0-5.0
SL-022-SA5C-SB-9.0-10.0
SL-012-SA5C-SB-4.0-5.0
SL-012-SA5C-SB-9.0-10.0
SL-013-SA5C-SB-4.0-5.0
SL-013-SA5C-SB-9.0-10.0
SL-017-SA5B-SS-0.0-0.5MS
SL-017-SA5B-SS-0.0-0.5MSD

Introduction

This data review covers 21 soil samples and one water sample 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.

N Presumptive evidence of presence of the constituent.

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 30.0% 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 less than or equal to 20.0% for unlabeled compounds and less than or equal to 30.0% for labeled compounds.

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
10349001-MB	12/15/10	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 OCDD OCDF	0.414 pg/L 1.22 pg/L 1.70 pg/L 1.56 pg/L 1.35 pg/L 1.31 pg/L 1.72 pg/L 1.17 pg/L 0.874 pg/L 1.40 pg/L 1.86 pg/L 5.79 pg/L 3.15 pg/L 2.97 pg/L 6.75 pg/L 3.65 pg/L	All water samples in SDG DX017
10356002-MB	12/22/10	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 1,2,3,6,7,8-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	0.0474 ng/Kg 0.111 ng/Kg 0.156 ng/Kg 0.0795 ng/Kg 0.228 ng/Kg 0.137 ng/Kg 0.279 ng/Kg 0.0718 ng/Kg 0.116 ng/Kg 0.279 ng/Kg 0.598 ng/Kg 0.222 ng/Kg 0.177 ng/Kg 0.397 ng/Kg 0.559 ng/Kg	All soil samples in SDG DX017

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
EB01-SA5B-120910	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 OCDD OCDF	0.160 pg/L 0.271 pg/L 0.665 pg/L 0.366 pg/L 0.739 pg/L 0.722 pg/L 1.12 pg/L 0.249 pg/L 0.325 pg/L 0.271 pg/L 0.502 pg/L 4.77 pg/L 2.49 pg/L 0.658 pg/L 2.77 pg/L 2.78 pg/L	0.160U pg/L 0.271U pg/L 0.665U pg/L 0.366U pg/L 0.739U pg/L 0.722U pg/L 1.12U pg/L 0.249U pg/L 0.325U pg/L 0.271U pg/L 0.502U pg/L 4.77U pg/L 2.49U pg/L 0.658U pg/L 2.77U pg/L 2.78U pg/L

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-015-SA5C-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.299 ng/Kg	0.299U ng/Kg
	2,3,4,7,8-PeCDF	0.219 ng/Kg	0.219U ng/Kg
	1,2,3,7,8-PeCDD	0.0714 ng/Kg	0.0714U ng/Kg
	1,2,3,4,7,8-HxCDF	0.194 ng/Kg	0.194U ng/Kg
	1,2,3,6,7,8-HxCDF	0.182 ng/Kg	0.182U ng/Kg
	2,3,4,6,7,8-HxCDF	0.278 ng/Kg	0.278U ng/Kg
	1,2,3,6,7,8-HxCDD	0.261 ng/Kg	0.261U ng/Kg
	1,2,3,7,8,9-HxCDD	0.330 ng/Kg	0.330U ng/Kg
	1,2,3,7,8,9-HxCDF	0.252 ng/Kg	0.252U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.66 ng/Kg	1.66U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.169 ng/Kg	0.169U ng/Kg
	OCDF	2.10 ng/Kg	2.10U ng/Kg
SL-015-SA5C-SB-9.0-10.0	1,2,3,7,8-PeCDF	0.135 ng/Kg	0.135U ng/Kg
	2,3,4,7,8-PeCDF	0.128 ng/Kg	0.128U ng/Kg
	1,2,3,7,8-PeCDD	0.0791 ng/Kg	0.0791U ng/Kg
	1,2,3,4,7,8-HxCDF	0.170 ng/Kg	0.170U ng/Kg
	1,2,3,6,7,8-HxCDF	0.146 ng/Kg	0.146U ng/Kg
	2,3,4,6,7,8-HxCDF	0.213 ng/Kg	0.213U ng/Kg
	1,2,3,7,8,9-HxCDD	0.225 ng/Kg	0.225U ng/Kg
	1,2,3,7,8,9-HxCDF	0.143 ng/Kg	0.143U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.45 ng/Kg	1.45U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.210 ng/Kg	0.210U ng/Kg
	OCDF	2.45 ng/Kg	2.45U ng/Kg
SL-020-SA5C-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0810 ng/Kg	0.0810U ng/Kg
	2,3,4,7,8-PeCDF	0.155 ng/Kg	0.155U ng/Kg
	1,2,3,7,8-PeCDD	0.0484 ng/Kg	0.0484U ng/Kg
	1,2,3,4,7,8-HxCDF	0.180 ng/Kg	0.180U ng/Kg
	1,2,3,6,7,8-HxCDF	0.137 ng/Kg	0.137U ng/Kg
	2,3,4,6,7,8-HxCDF	0.285 ng/Kg	0.285U ng/Kg
	1,2,3,6,7,8-HxCDD	0.142 ng/Kg	0.142U ng/Kg
	1,2,3,7,8,9-HxCDD	0.175 ng/Kg	0.175U ng/Kg
	1,2,3,7,8,9-HxCDF	0.154 ng/Kg	0.154U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.09 ng/Kg	1.09U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.138 ng/Kg	0.138U ng/Kg
	OCDF	0.987 ng/Kg	0.987U ng/Kg
SL-020-SA5C-SB-7.5-8.5	2,3,7,8-TCDD	0.0311 ng/Kg	0.0311U ng/Kg
	1,2,3,7,8-PeCDF	0.0230 ng/Kg	0.0230U ng/Kg
	2,3,4,7,8-PeCDF	0.0802 ng/Kg	0.0802U ng/Kg
	1,2,3,7,8-PeCDD	0.0363 ng/Kg	0.0363U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0813 ng/Kg	0.0813U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0488 ng/Kg	0.0488U ng/Kg
	2,3,4,6,7,8-HxCDF	0.114 ng/Kg	0.114U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0235 ng/Kg	0.0235U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0369 ng/Kg	0.0369U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.396 ng/Kg	0.396U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.285 ng/Kg	0.285U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0581 ng/Kg	0.0581U ng/Kg
	OCDD	0.698 ng/Kg	0.698U ng/Kg
	OCDF	0.265 ng/Kg	0.265U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-016-SA5C-SB-4.0-5.0	2,3,7,8-TCDD	0.0322 ng/Kg	0.0322U ng/Kg
	1,2,3,7,8-PeCDF	0.176 ng/Kg	0.176U ng/Kg
	2,3,4,7,8-PeCDF	0.175 ng/Kg	0.175U ng/Kg
	1,2,3,7,8-PeCDD	0.126 ng/Kg	0.126U ng/Kg
	1,2,3,4,7,8-HxCDF	0.159 ng/Kg	0.159U ng/Kg
	1,2,3,6,7,8-HxCDF	0.157 ng/Kg	0.157U ng/Kg
	2,3,4,6,7,8-HxCDF	0.219 ng/Kg	0.219U ng/Kg
	1,2,3,6,7,8-HxCDD	0.340 ng/Kg	0.340U ng/Kg
	1,2,3,7,8,9-HxCDD	0.254 ng/Kg	0.254U ng/Kg
	1,2,3,7,8,9-HxCDF	0.173 ng/Kg	0.173U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.16 ng/Kg	1.16U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.142 ng/Kg	0.142U ng/Kg
	OCDF	2.07 ng/Kg	2.07U ng/Kg
SL-016-SA5C-SB-9.0-10.0	2,3,7,8-TCDD	0.0242 ng/Kg	0.0242U ng/Kg
	1,2,3,7,8-PeCDF	0.134 ng/Kg	0.134U ng/Kg
	2,3,4,7,8-PeCDF	0.132 ng/Kg	0.132U ng/Kg
	1,2,3,7,8-PeCDD	0.0799 ng/Kg	0.0799U ng/Kg
	1,2,3,4,7,8-HxCDF	0.137 ng/Kg	0.137U ng/Kg
	1,2,3,6,7,8-HxCDF	0.124 ng/Kg	0.124U ng/Kg
	2,3,4,6,7,8-HxCDF	0.192 ng/Kg	0.192U ng/Kg
	1,2,3,6,7,8-HxCDD	0.217 ng/Kg	0.217U ng/Kg
	1,2,3,7,8,9-HxCDD	0.200 ng/Kg	0.200U ng/Kg
	1,2,3,7,8,9-HxCDF	0.151 ng/Kg	0.151U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.890 ng/Kg	0.890U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.111 ng/Kg	0.111U ng/Kg
	OCDF	1.27 ng/Kg	1.27U ng/Kg
SL-021-SA5C-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.185 ng/Kg	0.185U ng/Kg
	2,3,4,7,8-PeCDF	0.381 ng/Kg	0.381U ng/Kg
	1,2,3,4,7,8-HxCDF	0.247 ng/Kg	0.247U ng/Kg
	1,2,3,6,7,8-HxCDF	0.246 ng/Kg	0.246U ng/Kg
	2,3,4,6,7,8-HxCDF	0.302 ng/Kg	0.302U ng/Kg
	1,2,3,6,7,8-HxCDD	0.491 ng/Kg	0.491U ng/Kg
	1,2,3,7,8,9-HxCDD	0.352 ng/Kg	0.352U ng/Kg
	1,2,3,7,8,9-HxCDF	0.293 ng/Kg	0.293U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.90 ng/Kg	1.90U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.331 ng/Kg	0.331U ng/Kg
SL-021-SA5C-SB-9.0-10.0	1,2,3,7,8-PeCDF	0.167 ng/Kg	0.167U ng/Kg
	2,3,4,7,8-PeCDF	0.136 ng/Kg	0.136U ng/Kg
	1,2,3,7,8-PeCDD	0.157 ng/Kg	0.157U ng/Kg
	1,2,3,4,7,8-HxCDF	0.262 ng/Kg	0.262U ng/Kg
	1,2,3,6,7,8-HxCDF	0.187 ng/Kg	0.187U ng/Kg
	2,3,4,6,7,8-HxCDF	0.205 ng/Kg	0.205U ng/Kg
	1,2,3,7,8,9-HxCDD	0.304 ng/Kg	0.304U 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	1.73 ng/Kg	1.73U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.235 ng/Kg	0.235U ng/Kg
SL-017-SA5B-SS-0.0-0.5	2,3,7,8-TCDD	0.0244 ng/Kg	0.0244U ng/Kg
	1,2,3,7,8-PeCDF	0.149 ng/Kg	0.149U ng/Kg
	2,3,4,7,8-PeCDF	0.170 ng/Kg	0.170U ng/Kg
	1,2,3,7,8-PeCDD	0.221 ng/Kg	0.221U ng/Kg
	1,2,3,4,7,8-HxCDF	0.151 ng/Kg	0.151U ng/Kg
	1,2,3,6,7,8-HxCDF	0.161 ng/Kg	0.161U ng/Kg
	2,3,4,6,7,8-HxCDF	0.195 ng/Kg	0.195U ng/Kg
	1,2,3,7,8,9-HxCDD	0.580 ng/Kg	0.580U ng/Kg
	1,2,3,7,8,9-HxCDF	0.180 ng/Kg	0.180U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.82 ng/Kg	1.82U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.204 ng/Kg	0.204U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-029-SA5B-SS-0.0-0.5	2,3,7,8-TCDD	0.0508 ng/Kg	0.0508U ng/Kg
	1,2,3,7,8-PeCDF	0.136 ng/Kg	0.136U ng/Kg
	2,3,4,7,8-PeCDF	0.163 ng/Kg	0.163U ng/Kg
	1,2,3,7,8-PeCDD	0.248 ng/Kg	0.248U ng/Kg
	1,2,3,4,7,8-HxCDF	0.221 ng/Kg	0.221U ng/Kg
	1,2,3,6,7,8-HxCDF	0.310 ng/Kg	0.310U ng/Kg
	2,3,4,6,7,8-HxCDF	0.336 ng/Kg	0.336U ng/Kg
	1,2,3,7,8,9-HxCDF	0.223 ng/Kg	0.223U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.372 ng/Kg	0.372U ng/Kg
SL-034-SA5B-SS-0.0-0.5	2,3,7,8-TCDD	0.0432 ng/Kg	0.0432U ng/Kg
	1,2,3,7,8-PeCDF	0.119 ng/Kg	0.119U ng/Kg
	2,3,4,7,8-PeCDF	0.123 ng/Kg	0.123U ng/Kg
	1,2,3,7,8-PeCDD	0.323 ng/Kg	0.323U ng/Kg
	1,2,3,4,7,8-HxCDF	0.218 ng/Kg	0.218U ng/Kg
	1,2,3,6,7,8-HxCDF	0.238 ng/Kg	0.238U ng/Kg
	2,3,4,6,7,8-HxCDF	0.253 ng/Kg	0.253U ng/Kg
	1,2,3,7,8,9-HxCDF	0.189 ng/Kg	0.189U ng/Kg
	1,2,3,4,6,7,8-HpCDF	2.80 ng/Kg	2.80U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.296 ng/Kg	0.296U ng/Kg
SL-035-SA5B-SS-0.0-0.5	1,2,3,7,8-PeCDF	0.110 ng/Kg	0.110U ng/Kg
	2,3,4,7,8-PeCDF	0.210 ng/Kg	0.210U ng/Kg
	1,2,3,7,8-PeCDD	0.158 ng/Kg	0.158U ng/Kg
	1,2,3,4,7,8-HxCDF	0.134 ng/Kg	0.134U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0990 ng/Kg	0.0990U ng/Kg
	2,3,4,6,7,8-HxCDF	0.145 ng/Kg	0.145U ng/Kg
	1,2,3,6,7,8-HxCDD	0.351 ng/Kg	0.351U ng/Kg
	1,2,3,7,8,9-HxCDD	0.226 ng/Kg	0.226U ng/Kg
	1,2,3,7,8,9-HxCDF	0.124 ng/Kg	0.124U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.29 ng/Kg	1.29U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.201 ng/Kg	0.201U ng/Kg
SL-036-SA5B-SS-0.0-0.5	2,3,7,8-TCDD	0.0545 ng/Kg	0.0545U ng/Kg
	1,2,3,7,8-PeCDF	0.154 ng/Kg	0.154U ng/Kg
	2,3,4,7,8-PeCDF	0.185 ng/Kg	0.185U ng/Kg
	1,2,3,7,8-PeCDD	0.291 ng/Kg	0.291U ng/Kg
	1,2,3,4,7,8-HxCDF	0.194 ng/Kg	0.194U ng/Kg
	1,2,3,6,7,8-HxCDF	0.197 ng/Kg	0.197U ng/Kg
	2,3,4,6,7,8-HxCDF	0.228 ng/Kg	0.228U ng/Kg
	1,2,3,7,8,9-HxCDF	0.137 ng/Kg	0.137U ng/Kg
	1,2,3,4,6,7,8-HpCDF	2.21 ng/Kg	2.21U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.221 ng/Kg	0.221U ng/Kg
SL-022-SA5C-SB-4.0-5.0	2,3,7,8-TCDD	0.0143 ng/Kg	0.0143U ng/Kg
	1,2,3,7,8-PeCDF	0.0712 ng/Kg	0.0712U ng/Kg
	2,3,4,7,8-PeCDF	0.117 ng/Kg	0.117U ng/Kg
	1,2,3,7,8-PeCDD	0.0525 ng/Kg	0.0525U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0984 ng/Kg	0.0984U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0784 ng/Kg	0.0784U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0971 ng/Kg	0.0971U ng/Kg
	1,2,3,6,7,8-HxCDD	0.103 ng/Kg	0.103U ng/Kg
	1,2,3,7,8,9-HxCDD	0.131 ng/Kg	0.131U ng/Kg
	1,2,3,7,8,9-HxCDF	0.114 ng/Kg	0.114U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.318 ng/Kg	0.318U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.340 ng/Kg	0.340U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0732 ng/Kg	0.0732U ng/Kg
	OCDD	1.95 ng/Kg	1.95U ng/Kg
	OCDF	0.281 ng/Kg	0.281U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-022-SA5C-SB-9.0-10.0	2,3,7,8-TCDD	0.0162 ng/Kg	0.0162U ng/Kg
	1,2,3,7,8-PeCDF	0.0359 ng/Kg	0.0359U ng/Kg
	2,3,4,7,8-PeCDF	0.0762 ng/Kg	0.0762U ng/Kg
	1,2,3,7,8-PeCDD	0.0187 ng/Kg	0.0187U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0618 ng/Kg	0.0618U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0529 ng/Kg	0.0529U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0815 ng/Kg	0.0815U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0356 ng/Kg	0.0356U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0297 ng/Kg	0.0297U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0352 ng/Kg	0.0352U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.313 ng/Kg	0.313U ng/Kg
	1,2,3,4,6,7,8-HpCDD	0.192 ng/Kg	0.192U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0473 ng/Kg	0.0473U ng/Kg
	OCDD	0.687 ng/Kg	0.687U ng/Kg
	OCDF	0.252 ng/Kg	0.252U ng/Kg
SL-012-SA5C-SB-4.0-5.0	2,3,7,8-TCDD	0.0617 ng/Kg	0.0617U ng/Kg
	1,2,3,7,8-PeCDF	0.168 ng/Kg	0.168U ng/Kg
	2,3,4,7,8-PeCDF	0.198 ng/Kg	0.198U ng/Kg
	1,2,3,7,8-PeCDD	0.136 ng/Kg	0.136U ng/Kg
	1,2,3,4,7,8-HxCDF	0.107 ng/Kg	0.107U ng/Kg
	1,2,3,6,7,8-HxCDF	0.147 ng/Kg	0.147U ng/Kg
	2,3,4,6,7,8-HxCDF	0.172 ng/Kg	0.172U ng/Kg
	1,2,3,6,7,8-HxCDD	0.324 ng/Kg	0.324U ng/Kg
	1,2,3,7,8,9-HxCDD	0.344 ng/Kg	0.344U ng/Kg
	1,2,3,7,8,9-HxCDF	0.159 ng/Kg	0.159U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.25 ng/Kg	1.25U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.10 ng/Kg	0.10U ng/Kg
	OCDF	2.35 ng/Kg	2.35U ng/Kg
SL-012-SA5C-SB-9.0-10.0	2,3,7,8-TCDD	0.0149 ng/Kg	0.0149U ng/Kg
	1,2,3,7,8-PeCDF	0.0310 ng/Kg	0.0310U ng/Kg
	2,3,4,7,8-PeCDF	0.0823 ng/Kg	0.0823U ng/Kg
	1,2,3,7,8-PeCDD	0.0399 ng/Kg	0.0399U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0765 ng/Kg	0.0765U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0741 ng/Kg	0.0741U ng/Kg
	2,3,4,6,7,8-HxCDF	0.106 ng/Kg	0.106U ng/Kg
	1,2,3,6,7,8-HxCDD	0.0557 ng/Kg	0.0557U ng/Kg
	1,2,3,7,8,9-HxCDD	0.0796 ng/Kg	0.0796U ng/Kg
	1,2,3,7,8,9-HxCDF	0.0729 ng/Kg	0.0729U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.479 ng/Kg	0.479U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0514 ng/Kg	0.0514U ng/Kg
	OCDF	0.541 ng/Kg	0.541U ng/Kg
SL-013-SA5C-SB-4.0-5.0	1,2,3,7,8-PeCDF	0.0686 ng/Kg	0.0686U ng/Kg
	2,3,4,7,8-PeCDF	0.135 ng/Kg	0.135U ng/Kg
	1,2,3,7,8-PeCDD	0.0628 ng/Kg	0.0628U ng/Kg
	1,2,3,4,7,8-HxCDF	0.102 ng/Kg	0.102U ng/Kg
	1,2,3,6,7,8-HxCDF	0.0794 ng/Kg	0.0794U ng/Kg
	2,3,4,6,7,8-HxCDF	0.131 ng/Kg	0.131U ng/Kg
	1,2,3,6,7,8-HxCDD	0.333 ng/Kg	0.333U ng/Kg
	1,2,3,7,8,9-HxCDD	0.231 ng/Kg	0.231U ng/Kg
	1,2,3,7,8,9-HxCDF	0.120 ng/Kg	0.120U ng/Kg
	1,2,3,4,6,7,8-HpCDF	1.14 ng/Kg	1.14U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.106 ng/Kg	0.106U ng/Kg

Sample	Compound	Reported Concentration	Modified Final Concentration
SL-013-SA5C-SB-9.0-10.0	1,2,3,7,8-PeCDF	0.0663 ng/Kg	0.0663U ng/Kg
	2,3,4,7,8-PeCDF	0.0794 ng/Kg	0.0794U ng/Kg
	1,2,3,4,7,8-HxCDF	0.0605 ng/Kg	0.0605U ng/Kg
	1,2,3,6,7,8-HxCDF	0.129 ng/Kg	0.129U ng/Kg
	2,3,4,6,7,8-HxCDF	0.0968 ng/Kg	0.0968U ng/Kg
	1,2,3,6,7,8-HxCDD	0.270 ng/Kg	0.270U ng/Kg
	1,2,3,7,8,9-HxCDD	0.299 ng/Kg	0.299U ng/Kg
	1,2,3,7,8,9-HxCDF	0.117 ng/Kg	0.117U ng/Kg
	1,2,3,4,6,7,8-HpCDF	0.541 ng/Kg	0.541U ng/Kg
	1,2,3,4,7,8,9-HpCDF	0.0783 ng/Kg	0.0783U ng/Kg
	OCDF	1.07 ng/Kg	1.07U ng/Kg

Sample EB01-SA5B-120910 was identified as an equipment blank. No polychlorinated dioxin/dibenzofuran contaminants were found in this blank with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB01-SA5B-120910	12/9/10	2,3,7,8-TCDD	0.478 pg/L	SL-017-SA5B-SS-0.0-0.5
		1,2,3,7,8-PeCDD	0.366 pg/L	SL-029-SA5B-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.249 pg/L	SL-034-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HxCDD	0.325 pg/L	SL-035-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HxCDD	0.271 pg/L	SL-036-SA5B-SS-0.0-0.5
		1,2,3,4,6,7,8-HpCDD	2.49 pg/L	
		OCDD	2.77 pg/L	
		2,3,7,8-TCDF	0.160 pg/L	
		1,2,3,7,8-PeCDF	0.271 pg/L	
		2,3,4,7,8-PeCDF	0.665 pg/L	
		1,2,3,4,7,8-HxCDF	0.739 pg/L	
		1,2,3,6,7,8-HxCDF	0.722 pg/L	
		2,3,4,6,7,8-HxCDF	0.502 pg/L	
		1,2,3,7,8,9-HxCDF	1.12 pg/L	
		1,2,3,4,6,7,8-HpCDF	4.77 pg/L	
		1,2,3,4,7,8,9-HpCDF	0.658 pg/L	
		OCDF	2.78 pg/L	

Sample concentrations were compared to concentrations detected in the field blanks. The sample concentrations were either not detected or were significantly greater (>5X for other contaminants) than the concentrations found in the associated field blanks.

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 the QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-017-SA5B-SS-0.0-0.5MS/MSD (SL-017-SA5B-SS-0.0-0.5)	OCDD	318 (40-135)	-	72 (≤20)	J (all detects)	A

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 with the following exceptions:

Sample	Internal Standards	%R (Limits)	Compound	Flag	A or P
10349001-MB	^{13}C-2,3,7,8-TCDF	18 (24-169)	All TCL compounds	J (all detects) UJ (all non-detects)	P
	^{13}C-2,3,7,8,-TCDD	11 (25-164)			
	^{13}C-1,2,3,7,8-PeCDF	18 (24-185)			
	^{13}C-2,3,4,7,8-PeCDF	19 (21-178)			
	^{13}C-1,2,3,7,8-PeCDD	16 (25-181)			
	^{13}C-1,2,3,4,7,8-HxCDF	18 (26-152)			
	^{13}C-1,2,3,6,7,8-HxCDF	17 (26-123)			
	^{13}C-2,3,4,6,7,8-HxCDF	18 (28-136)			
	^{13}C-1,2,3,4,7,8-HxCDD	17 (32-141)			
	^{13}C-1,2,3,6,7,8-HxCDD	16 (28-130)			
	^{13}C-1,2,3,7,8,9-HxCDF	17 (29-147)			
	^{13}C-1,2,3,4,6,7,8-HpCDF	16 (28-143)			
	^{13}C-1,2,3,4,6,7,8-HpCDD	16 (23-140)			
	^{13}C-1,2,3,4,7,8,9-HpCDF	15 (26-138)			
	^{13}C-OCDD	12 (17-157)			
	^{13}C-OCDF	12 (17-157)			
	^{13}C-1,2,3,7,8,9-HxCDD	17 (28-130)			

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 DX017	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

No field duplicates were identified in this SDG.

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Data Qualification Summary - SDG DX017

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DX017	SL-017-SA5B-SS-0.0-0.5	OCDD	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DX017	SL-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 EB01-SA5B-120910 SL-029-SA5B-SS-0.0-0.5 SL-034-SA5B-SS-0.0-0.5 SL-035-SA5B-SS-0.0-0.5 SL-036-SA5B-SS-0.0-0.5 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10.0 SL-012-SA5C-SB-4.0-5.0 SL-012-SA5C-SB-9.0-10.0 SL-013-SA5C-SB-4.0-5.0 SL-013-SA5C-SB-9.0-10.0	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Laboratory Blank Data Qualification Summary - SDG DX017

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX017	EB01-SA5B-120910	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 OCDD OCDF	0.160U pg/L 0.271U pg/L 0.665U pg/L 0.366U pg/L 0.739U pg/L 0.722U pg/L 1.12U pg/L 0.249U pg/L 0.325U pg/L 0.271U pg/L 0.502U pg/L 4.77U pg/L 2.49U pg/L 0.658U pg/L 2.77U pg/L 2.78U pg/L	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX017	SL-015-SA5C-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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.299U ng/Kg 0.219U ng/Kg 0.0714U ng/Kg 0.194U ng/Kg 0.182U ng/Kg 0.278U ng/Kg 0.261U ng/Kg 0.330U ng/Kg 0.252U ng/Kg 1.66U ng/Kg 0.169U ng/Kg 2.10U ng/Kg	A	B
DX017	SL-015-SA5C-SB-9.0-10.0	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 1,2,3,7,8,9-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	0.135U ng/Kg 0.128U ng/Kg 0.0791U ng/Kg 0.170U ng/Kg 0.146U ng/Kg 0.213U ng/Kg 0.225U ng/Kg 0.143U ng/Kg 1.45U ng/Kg 0.210U ng/Kg 2.45U ng/Kg	A	B
DX017	SL-020-SA5C-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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0810U ng/Kg 0.155U ng/Kg 0.0484U ng/Kg 0.180U ng/Kg 0.137U ng/Kg 0.285U ng/Kg 0.142U ng/Kg 0.175U ng/Kg 0.154U ng/Kg 1.09U ng/Kg 0.138U ng/Kg 0.987U ng/Kg	A	B
DX017	SL-020-SA5C-SB-7.5-8.5	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 1,2,3,6,7,8-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	0.0311U ng/Kg 0.0230U ng/Kg 0.0802U ng/Kg 0.0363U ng/Kg 0.0813U ng/Kg 0.0488U ng/Kg 0.114U ng/Kg 0.0235U ng/Kg 0.0369U ng/Kg 0.396U ng/Kg 0.285U ng/Kg 0.0581U ng/Kg 0.698U ng/Kg 0.265U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX017	SL-016-SA5C-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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0322U ng/Kg 0.176U ng/Kg 0.175U ng/Kg 0.126U ng/Kg 0.159U ng/Kg 0.157U ng/Kg 0.219U ng/Kg 0.340U ng/Kg 0.254U ng/Kg 0.173U ng/Kg 1.16U ng/Kg 0.142U ng/Kg 2.07U ng/Kg	A	B
DX017	SL-016-SA5C-SB-9.0-10.0	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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0242U ng/Kg 0.134U ng/Kg 0.132U ng/Kg 0.0799U ng/Kg 0.137U ng/Kg 0.124U ng/Kg 0.192U ng/Kg 0.217U ng/Kg 0.200U ng/Kg 0.151U ng/Kg 0.890U ng/Kg 0.111U ng/Kg 1.27U ng/Kg	A	B
DX017	SL-021-SA5C-SB-4.0-5.0	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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.185U ng/Kg 0.381U ng/Kg 0.247U ng/Kg 0.246U ng/Kg 0.302U ng/Kg 0.491U ng/Kg 0.352U ng/Kg 0.293U ng/Kg 1.90U ng/Kg 0.331U ng/Kg	A	B
DX017	SL-021-SA5C-SB-9.0-10.0	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 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.167U ng/Kg 0.136U ng/Kg 0.157U ng/Kg 0.262U ng/Kg 0.187U ng/Kg 0.205U ng/Kg 0.304U ng/Kg 0.251U ng/Kg 1.73U ng/Kg 0.235U ng/Kg	A	B
DX017	SL-017-SA5B-SS-0.0-0.5	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 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.0244U ng/Kg 0.149U ng/Kg 0.170U ng/Kg 0.221U ng/Kg 0.151U ng/Kg 0.161U ng/Kg 0.195U ng/Kg 0.580U ng/Kg 0.180U ng/Kg 1.82U ng/Kg 0.204U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX017	SL-029-SA5B-SS-0.0-0.5	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 1,2,3,7,8,9-HxCDF 1,2,3,4,7,8,9-HpCDF	0.0508U ng/Kg 0.136U ng/Kg 0.163U ng/Kg 0.248U ng/Kg 0.221U ng/Kg 0.310U ng/Kg 0.336U ng/Kg 0.223U ng/Kg 0.372U ng/Kg	A	B
DX017	SL-034-SA5B-SS-0.0-0.5	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 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.0432U ng/Kg 0.119U ng/Kg 0.123U ng/Kg 0.323U ng/Kg 0.218U ng/Kg 0.238U ng/Kg 0.253U ng/Kg 0.189U ng/Kg 2.80U ng/Kg 0.296U ng/Kg	A	B
DX017	SL-035-SA5B-SS-0.0-0.5	1,2,3,7,8-PeCDF 2,3,4,7,8-PeCDF 1,2,3,7,8-PeCDD 1,2,3,4,7,8-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 1,2,3,4,7,8,9-HpCDF	0.110U ng/Kg 0.210U ng/Kg 0.158U ng/Kg 0.134U ng/Kg 0.0990U ng/Kg 0.145U ng/Kg 0.351U ng/Kg 0.226U ng/Kg 0.124U ng/Kg 1.29U ng/Kg 0.201U ng/Kg	A	B
DX017	SL-036-SA5B-SS-0.0-0.5	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 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.0545U ng/Kg 0.154U ng/Kg 0.185U ng/Kg 0.291U ng/Kg 0.194U ng/Kg 0.197U ng/Kg 0.228U ng/Kg 0.137U ng/Kg 2.21U ng/Kg 0.221U ng/Kg	A	B
DX017	SL-022-SA5C-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 1,2,3,6,7,8-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	0.0143U ng/Kg 0.0712U ng/Kg 0.117U ng/Kg 0.0525U ng/Kg 0.0984U ng/Kg 0.0784U ng/Kg 0.0971U ng/Kg 0.103U ng/Kg 0.131U ng/Kg 0.114U ng/Kg 0.318U ng/Kg 0.340U ng/Kg 0.0732U ng/Kg 1.95U ng/Kg 0.281U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX017	SL-022-SA5C-SB-9.0-10.0	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 1,2,3,6,7,8-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	0.0162U ng/Kg 0.0359U ng/Kg 0.0762U ng/Kg 0.0187U ng/Kg 0.0618U ng/Kg 0.0529U ng/Kg 0.0815U ng/Kg 0.0356U ng/Kg 0.0297U ng/Kg 0.0352U ng/Kg 0.313U ng/Kg 0.192U ng/Kg 0.0473U ng/Kg 0.687U ng/Kg 0.252U ng/Kg	A	B
DX017	SL-012-SA5C-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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0617U ng/Kg 0.168U ng/Kg 0.198U ng/Kg 0.136U ng/Kg 0.107U ng/Kg 0.147U ng/Kg 0.172U ng/Kg 0.324U ng/Kg 0.344U ng/Kg 0.159U ng/Kg 1.25U ng/Kg 0.10U ng/Kg 2.35U ng/Kg	A	B
DX017	SL-012-SA5C-SB-9.0-10.0	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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF OCDF	0.0149U ng/Kg 0.0310U ng/Kg 0.0823U ng/Kg 0.0399U ng/Kg 0.0765U ng/Kg 0.0741U ng/Kg 0.106U ng/Kg 0.0557U ng/Kg 0.0796U ng/Kg 0.0729U ng/Kg 0.479U ng/Kg 0.0514U ng/Kg 0.541U ng/Kg	A	B
DX017	SL-013-SA5C-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 1,2,3,6,7,8-HxCDD 1,2,3,7,8,9-HxCDD 1,2,3,7,8,9-HxCDF 1,2,3,4,6,7,8-HpCDF 1,2,3,4,7,8,9-HpCDF	0.0686U ng/Kg 0.135U ng/Kg 0.0628U ng/Kg 0.102U ng/Kg 0.0794U ng/Kg 0.131U ng/Kg 0.333U ng/Kg 0.231U ng/Kg 0.120U ng/Kg 1.14U ng/Kg 0.106U ng/Kg	A	B

SDG	Sample	Compound	Modified Final Concentration	A or P	Code
DX017	SL-013-SA5C-SB-9.0-10.0	1,2,3,7,8-PeCDF	0.0663U ng/Kg	A	B
		2,3,4,7,8-PeCDF	0.0794U ng/Kg		
		1,2,3,4,7,8-HxCDF	0.0605U ng/Kg		
		1,2,3,6,7,8-HxCDF	0.129U ng/Kg		
		2,3,4,6,7,8-HxCDF	0.0968U ng/Kg		
		1,2,3,6,7,8-HxCDD	0.270U ng/Kg		
		1,2,3,7,8,9-HxCDD	0.299U ng/Kg		
		1,2,3,7,8,9-HxCDF	0.117U ng/Kg		
		1,2,3,4,6,7,8-HpCDF	0.541U ng/Kg		
		1,2,3,4,7,8,9-HpCDF	0.0783U ng/Kg		
		OCDF	1.07U ng/Kg		

Santa Susana Field Laboratory
Dioxins/Dibenzofurans - Field Blank Data Qualification Summary - SDG DX017

No Sample Data Qualified in this SDG

LDC #: 25340O21 **VALIDATION COMPLETENESS WORKSHEET** Date: 15/16/11
SDG #: DX017 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 12/8 – 12/9/10
II.	HRGC/HRMS Instrument performance check	A	
III.	Initial calibration	A	
IV.	Routine calibration/[illegible]	A	
V.	Blanks	SW	
VI.	Matrix spike/Matrix spike duplicates	SW	
VII.	Laboratory control samples A	SW	LCS
VIII.	Regional quality assurance and quality control	N	
IX.	Internal standards	SW	
X.	Target compound identifications	A	
XI.	Compound quantitation and CRQLs	A	
XII.	System performance	A	
XIII.	Overall assessment of data	A	
XIV.	Field duplicates	N	
XV.	Field blanks	SW	EB = 10

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-015-SA5C-SB-4.0-5.0	11	SL-029-SA5B-SS-0.0-0.5	21	SL-017-SA5B-SS-0.0-0.5MS	31	
2	SL-015-SA5C-SB-9.0-10.0	12	SL-034-SA5B-SS-0.0-0.5	22	SL-017-SA5B-SS-0.0-0.5MSD	32	
3	SL-020-SA5C-SB-4.0-5.0	13	SL-035-SA5B-SS-0.0-0.5	23		33	
4	SL-020-SA5C-SB-7.5-8.5	14	SL-036-SA5B-SS-0.0-0.5	24	103560O2-MB	34	
5	SL-016-SA5C-SB-4.0-5.0	15	SL-022-SA5C-SB-4.0-5.0	25	103490O1-MB	35	
6	SL-016-SA5C-SB-9.0-10.0	16	SL-022-SA5C-SB-9.0-10.0	26		36	
7	SL-021-SA5C-SB-4.0-5.0	17	SL-012-SA5C-SB-4.0-5.0	27		37	
8	SL-021-SA5C-SB-9.0-10.0	18	SL-012-SA5C-SB-9.0-10.0	28		38	
9	SL-017-SA5B-SS-0.0-0.5	19	SL-013-SA5C-SB-4.0-5.0	29		39	
10	EB01-SA5B-120910 W	20	SL-013-SA5C-SB-9.0-10.0	30		40	

Notes: _____

LDC #: 75340021

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

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?	✓	A		

LDC #: 25340621

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
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%~~ QC 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?	✓			
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.	✓			

LDC #: 25340B21
SDG #: see cover

VALIDATION FINDINGS WORKSHEET

Reviewer: EJ
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 Method 8290)

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

Notes:

LDC #: 25340021

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT
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". * EMPC

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: 12/15/10 **Blank analysis date:** 12/21/10 **Associated samples:** All water (B)

Conc. units: pg/L

Compound	Blank ID	Sample Identification								
	1034900	1-MB	10							
H	0.414		0.160 *U							
I	1.22		0.271 *U							
J	1.70		0.665 *U							
B	1.56		0.366 *U							
K	1.35		0.739 *U							
L	1.31		0.722 U							
M	1.72		1.12 U							
C	1.17		0.249 *U							
D	0.874		0.325 *U							
E	1.40		0.271 U							
N	1.86		0.502 U							
O	5.79		4.77 U							
F	3.15		2.49 U							
P	2.97		0.658 U							
G	6.75		2.77 U							
Q	3.65		2.78 U							

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 #: 25340021

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: EZ
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 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? *EMPC
Y N N/A Was the method blank contaminated?

Blank extraction date: 12/22/10 **Blank analysis date:** 12/28/10 **Associated samples:** All soils (B)
Conc. units: ng/kg

Compound	Blank ID	Sample Identification								
	10356002-MB	5x	1	2	3	4	5	6	7	8
A	0.0474	0.237				0.0311*U	0.0322U	0.0242*U		
I	0.111*	0.555	0.299*U	0.135U	0.0810*U	0.0230*U	0.176*U	0.134U	0.185U	0.167*U
J	0.156*	0.78	0.219U	0.128U	0.155U	0.0802U	0.175U	0.132U	0.381*U	0.136U
B	0.0795*	0.3975	0.0714U	0.0791*U	0.0484U	0.0363*U	0.126*U	0.0799*U		0.157*U
K	0.228*	1.14	0.194U	0.170*U	0.180*U	0.0813U	0.159U	0.137U	0.247U	0.262*U
L	0.137*	0.685	0.182U	0.146*U	0.137*U	0.0488U	0.157U	0.124U	0.246U	0.187U
M	0.279*	1.395	0.278U	0.213U	0.285U	0.114U	0.219U	0.192*U	0.302U	0.205*U
D	0.0718*	0.359	0.261U		0.142U	0.0235U	0.340U	0.217*U	0.491U	
E	0.116*	0.58	0.330U	0.225*U	0.175U	0.0369U	0.254U	0.200*U	0.352*U	0.304*U
N	0.279	1.395	0.252*U	0.143U	0.154U	-	0.173*U	0.151*U	0.293*U	0.251U
O	0.598	2.99	1.66U	1.45U	1.09U	0.396U	1.16U	0.890U	1.90U	1.73U
F	0.222	1.11				0.285*U				
P	0.177	0.885	0.169*U	0.210*U	0.138U	0.0581*U	0.142*U	0.111U	0.331U	0.235U
G	0.397	1.985				0.698U				
Q	0.559	2.795	2.10U	2.45U	0.987U	0.265U	2.07U	1.27U		

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 #: 25340021

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: EJ
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 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? *EMPC
Y N N/A Was the method blank contaminated?

Blank extraction date: 12/22/10 **Blank analysis date:** 12/28/10 **Associated samples:** All soils (B)

Conc. units: ng/kg

Compound	Blank ID	Sample Identification								
	10356002-MB	5x	9	11	12	13	14	15	16	17
A	0.0474	0.237	0.0244*U	0.0508*U	0.0432 U		0.0545*U	0.0143*U	0.0162*U	0.0617*U
I	0.111*	0.555	0.149U	0.136*U	0.119 U	0.110*U	0.154U	0.0712U	0.0359*U	0.168*U
J	0.156*	0.78	0.170U	0.163*U	0.123 U	0.210*U	0.185*U	0.117*U	0.0762U	0.198U
B	0.0795*	0.3975	0.221*U	0.248*U	0.323 U	0.158*U	0.291*U	0.0525*U	0.0187*U	0.136*U
K	0.228*	1.14	0.151*U	0.221U	0.218 U	0.134*U	0.194*U	0.0984U	0.0618*U	0.107*U
L	0.137*	0.685	0.161U	0.310U	0.238 U	0.0990U	0.197*U	0.0784U	0.0529*U	0.147U
M	0.279*	1.395	0.195U	0.336*U	0.253 U	0.145*U	0.228U	0.0971*U	0.0815U	0.172U
D	0.0718*	0.359				0.351U		0.103U	0.0356U	0.324U
E	0.116*	0.58	0.580U			0.226*U		0.131*U	0.0297*U	0.344U
N	0.279	1.395	0.180U	0.223U	0.189 U	0.124U	0.137*U	0.114U	0.0352*U	0.159*U
O	0.598	2.99	1.82U		2.80 U	1.29U	2.21U	0.318U	0.313U	1.25U
F	0.222	1.11						0.340U	0.192U	
P	0.177	0.885	0.204*U	0.372U	0.296 U	0.201*U	0.221*U	0.0732*U	0.0473U	0.10U
G	0.397	1.985						1.95U	0.687U	
Q	0.559	2.795						0.281U	0.252U	2.35U

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 #: 25340 O2 /

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: F7
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 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? *EMPC
Y N N/A Was the method blank contaminated?

Blank extraction date: 12/22/10 **Blank analysis date:** 12/28/10 **Associated samples:** All soils (B)
Conc. units: ng/kg

Compound	Blank ID	Sample Identification								
	10356002-MB	5x	18	19	20					
A	0.0474	0.237	0.0149U							
I	0.111*	0.555	0.0310*U	0.0686*U	0.0663*U					
J	0.156*	0.78	0.0823*U	0.135U	0.0794U					
B	0.0795*	0.3975	0.0399*U	0.0628U						
K	0.228*	1.14	0.0765U	0.102*U	0.0605*U					
L	0.137*	0.685	0.0741U	0.0794*U	0.129U					
M	0.279*	1.395	0.106U	0.131*U	0.0968*U					
D	0.0718*	0.359	0.0557*U	0.333*U	0.270U					
E	0.116*	0.58	0.0796U	0.231U	0.299U					
N	0.279	1.395	0.0729*U	0.120U	0.117*U					
O	0.598	2.99	0.479U	1.14U	0.541*U					
F	0.222	1.11								
P	0.177	0.885	0.0514*U	0.106U	0.0783*U					
G	0.397	1.985								
Q	0.559	2.795	0.541U		1.07U					

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 #: 25340021

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: FT
2nd Reviewer:

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 Method 8290)

* TMPC

(Y) N N/A Were field blanks identified in this SDG?
Blank units: pg/L **Associated sample units:** ng/kg
Sampling date: 12/9/10
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 9, 11 → 14 (F) >5X

Compound	Blank ID	Sample Identification								
	10									
A	0.478 *									
B	0.366 *									
C	0.249 *									
D	0.325 *									
E	0.271									
F	2.49									
G	2.77									
H	0.160 *									
I	0.271 *									
J	0.665 *									
K	0.739 *									
L	0.722									
N	0.502									
M	1.12									
O	4.77									
P	0.658									
Q	2.78									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Samples with compound concentrations within five times the associated field blank concentration are listed above, these sample results were qualified as not detected, "U".

LDC #: 25340 02 /

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: FT
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 Method 8290)

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
		21 + 22	G	318 (~~78-144~~)	( )	72 (20)	9	J/A det (a)
				(40-135	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25340021

VALIDATION FINDINGS WORKSHEET
Internal Standards

Reviewer: FT
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 Method 8290)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y (N) N/A Are all internal standard recoveries were within the 40-135% criteria?
Y/N N/A Was the S/N ratio all internal standard peaks ≥ 10?

#	Date	Lab ID/Reference	Internal Standard	% Recovery (~~Limit: 40-135%~~) QC limit	Qualifications
		10349001-MB	A	18 (24-169)	J/UJ/P QUAL All TCL
			B	11 (25-164)	
			C	18 (24-185)	
			$^{13}C_{12}$-23478-PeCDF	19 (21-178)	
			D	16 (25-181)	
			$^{13}C_{12}$-123478-HxCDF	18 (26-152)	
			E	17 (26-123)	
			$^{13}C_{12}$-234678-HxCDF	18 (28-136)	
			$^{13}C_{12}$-123478-HxCDD	17 (32-141)	
			F	16 (28-130)	
			$^{13}C_{12}$-123789-HxCDF	17 (29-147)	
			G	~~17~~ 16 (28-143)	
			H	~~16~~ 16 (23-140)	
			$^{13}C_{12}$-1234789-HpCDF	~~16~~ 15 (26-138)	
			I	~~15~~ 12 (17-157)	
			$^{13}C_{12}$-OCDF	Δ 12 (17-157)	
			$^{13}C_{12}$-123789-HxCDD	17 (28-130)	
				( )	
				( )	
				( )	

	Internal Standards	Check Standard Used
A	^{13}C-2,3,7,8-TCDF	
B	^{13}C-2,3,7,8-TCDD	
C	^{13}C-1,2,3,7,8-PeCDF	
D	^{13}C-1,2,3,7,8-PeCDD	
E	^{13}C-1,2,3,6,7,8-HxCDF	
F	^{13}C-1,2,3,6,7,8-HxCDD	
G	^{13}C-1,2,3,4,6,7,8-HpCDF	
H	^{13}C-1,2,3,4,6,7,8-HpCDD	
I	^{13}C-OCDD	

	Recovery Standards	Check Standard Used
K	^{13}C-1,2,3,4-TCDD	
L	^{13}C-1,2,3,7,8,9-HxCDD	
M		
N		
O		
P		
Q		
R		
T		

LDC #: 25 34012A1

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
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 = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard
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	ICAL SOIL DB5MS	7/16/10	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.044	1.044	1.131	1.131	12.74	12.74
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.084	1.084	1.116	1.116	3.56	3.56
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.027	1.027	1.062	1.062	2.60	2.60
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.106	1.106	1.130	1.130	2.68	2.68
			OCDF (^{13}C-OCDF)	1.053	1.053	1.094	1.094	3.54	3.54
2	ICAL SOIL DB5MS	10/26/10	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.024	1.024	1.010	1.010	3.60	3.60
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.131	1.131	1.078	1.078	9.43	9.43
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	0.969	0.969	1.002	1.002	2.30	2.30
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.039	1.039	1.065	1.065	2.17	2.17
			OCDF (^{13}C-OCDF)	0.962	0.962	0.975	0.975	1.13	1.13
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 #: 24084

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
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:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
$\%RSD = 100 * (S/X)$

A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard
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	ICAL	12/21/10	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	1.168	1.168	1.204	1.204	2.30	2.30
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	1.278	1.278	1.294	1.294	3.42	3.42
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	1.087	1.087	1.051	1.051	2.65	2.65
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	1.121	1.121	1.153	1.153	2.53	2.53
			OCDF (^{13}C-OCDF)	1.019	1.019	1.052	1.052	4.10	4.10
2			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)						
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 #: 25340021

VALIDATION FINDINGS WORKSHEET
Routine Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

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)	conc. Average ~~RRF~~ (Initial)	Reported conc. RRF (CC)	Recalculated conc. RRF (CC)	Reported %R	Recalculated %R
1	ccv 11:25	12/28/10	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	10.0	10.390	10.660	~~104~~ 107	107
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)	10.0	10.390	10.390	104	104
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)	50.0	52.670	52.670	105	105
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)	50.0	51.800	51.800	104	104
			OCDF (^{13}C-OCDF)	100.0	103.570	103.570	104	104
2	ccv 23:36	12/30/10	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	↓	11.020	11.020	110	110
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)		10.730	10.730	107	107
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)		54.240	54.240	108	108
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)		54.220	54.220	108	108
			OCDF (^{13}C-OCDF)		107.740	107.740	108	108
3	ccv 22:25	12/20/10	2,3,7,8-TCDF (^{13}C-2,3,7,8-TCDF)	↓	9.690	9.690	97	97
			2,3,7,8-TCDD (^{13}C-2,3,7,8-TCDD)		9.710	9.710	97	97
			1,2,3,6,7,8-HxCDD (^{13}C-1,2,3,6,7,8-HxCDD)		51.260	51.260	103	103
			1,2,3,4,6,7,8-HpCDD (^{13}C-1,2,4,6,7,8,-HpCDD)		52.090	52.090	104	104
			OCDF (^{13}C-OCDF)		102.060	102.060	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 #: 25340 021

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 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 = | MSR - MSDR | * 2/(MSR + MSDR) MSR = Matrix spike percent recovery MSDR = Matrix spike duplicate percent recovery

MS/MSD samples: 21 + 22

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	0.0325	23	23	105	105	105	105	0	0
1,2,3,7,8-PeCDD	109	109	0.221	111	112	102	102	102	102	1	1
1,2,3,4,7,8-HxCDD	109	109	0.127	116	113	106	106	104	104	2	2
1,2,3,4,7,8,9-HpCDF	109	109	0.204	110	109	101	101	99	99	1	1
OCDF	219	219	3.90	232	223	105	105	100	100	4	4

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 #: 53402/

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS Dioxins/Dibenzofurans (EPA SW 846 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 = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: 1035600-LCS 401

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	20.0	NA	19.9	NA	100	100				
1,2,3,7,8-PeCDD	100.0		103		103	103				
1,2,3,4,7,8-HxCDD	100.00		101		101	101				
1,2,3,4,7,8,9-HpCDF	100.00		97.2		97	97				
OCDF	200.0		197		99	99	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.

Descriptor	Accurate mass[a]	Ion ID	Elemental Composition	Analyte	Descriptor	Accurate Mass[a]	Ion ID	Elemental Composition	Analyte
1	303.9016	M	$C_{12}H_4{}^{35}Cl_4O$	TCDF	4	407.7818	M+2	$C_{12}H^{35}Cl_6{}^{37}ClO$	HpCDF
	305.8987	M+2	$C_{12}H_4{}^{35}Cl_3{}^{37}C10$	TCDF		409.7788	M+4	$C_{12}H^{35}Cl_5{}^{37}Cl_2O$	HpCDF
	315.9419	M	$^{13}C_{12}H_4{}^{35}Cl_4O$	TCDF (S)		417.8250	M	$^{13}C_{12}H^{35}Cl_7O$	HpCDF (S)
	317.9389	M+2	$^{13}C_{12}H_4{}^{35}Cl_3{}^{37}ClO$	TCDF (S)		419.8220	M+2	$^{13}C_{12}H^{35}Cl_6{}^{37}ClO$	HpCDF
	319.8965	M	$C_{12}H_4{}^{35}Cl_4O_2$	TCDD		423.7767	M+2	$C_{12}H^{35}Cl_6{}^{37}ClO_2$	HpCDD
	321.8936	M+2	$C_{12}H_4{}^{35}Cl_3{}^{37}C10_2$	TCDD		425.7737	M+4	$C_{12}H^{35}Cl_5{}^{37}Cl_2O_2$	HpCDD
	331.9368	M	$^{13}C_{12}H_4{}^{35}Cl_4O_2$	TCDD (S)		435.8169	M+2	$^{13}C_{12}H^{35}Cl_6{}^{37}ClO_2$	HpCDD (S)
	333.9338	M+2	$^{13}C_{12}H_4{}^{35}Cl_3{}^{37}ClO_2$	TCDD (S)		437.8140	M+4	$^{13}C_{12}H^{35}Cl_5{}^{37}Cl_2O_2$	HpCDD (S)
	375.8364	M+2	$C_{12}H_4{}^{35}Cl_5{}^{37}ClO$	HxCDPE		479.7165	M+4	$C_{12}H^{35}Cl_7{}^{37}Cl_2O$	NCDPE
	[354.9792]	LOCK	C_9F_{13}	PFK		[430.9728]	LOCK	C_9F_{17}	PFK
2	339.8597	M+2	$C_{12}H_3{}^{35}Cl_4{}^{37}ClO$	PeCDF	5	441.7428	M+2	$C_{12}{}^{35}Cl_7{}^{37}ClO$	OCDF
	341.8567	M+4	$C_{12}H_3{}^{35}Cl_3{}^{37}Cl_2O$	PeCDF		443.7399	M+4	$C_{12}{}^{35}Cl_6{}^{37}Cl_2O$	OCDF
	351.9000	M+2	$^{13}C_{12}H_3{}^{35}Cl_4{}^{37}C10$	PeCDF (S)		457.7377	M+2	$C_{12}{}^{35}Cl_7{}^{37}ClO_2$	OCDD
	353.8970	M+4	$^{13}C_{12}H_3{}^{35}Cl_3{}^{37}Cl_2O$	PeCDF (S)		459.7348	M+4	$C_{12}{}^{35}Cl_6{}^{37}Cl_2O_2$	OCDD
	355.8546	M+2	$C_{12}H_3{}^{35}Cl_4{}^{37}ClO_2$	PeCDD		469.7780	M+2	$^{13}C_{12}{}^{35}Cl_7{}^{37}ClO_2$	OCDD (S)
	357.8516	M+4	$C_{12}H_3{}^{35}Cl_3{}^{37}Cl_2O_2$	PeCDD		471.7750	M+4	$^{13}C_{12}{}^{35}Cl_6{}^{37}Cl_2O_2$	OCDD (S)
	367.8949	M+2	$^{13}C_{12}H_3{}^{35}Cl_4{}^{37}ClO_2$	PeCDD (S)		513.6775	M+4	$C_{12}{}^{35}Cl_6{}^{37}Cl_2O$	DCDPE
	369.8919	M+4	$^{13}C_{12}H_3{}^{35}Cl_3{}^{37}Cl_2O_2$	PeCDD (S)		[422.9278]	LOCK	$C_{10}F_{17}$	PFK
	409.7974	M+2	$C_{12}H_3{}^{35}Cl_6{}^{37}ClO$	HpCDPE					
	[354.9792]	LOCK	C_9F_{13}	PFK					
3	373.8208	M+2	$C_{12}H_2{}^{35}Cl_5{}^{37}ClO$	HxCDF					
	375.8178	M+4	$C_{12}H_2{}^{35}Cl_4{}^{37}Cl_2O$	HxCDF					
	383.8639	M	$^{13}C_{12}H_2{}^{35}Cl_6O$	HxCDF (S)					
	385.8610	M+2	$^{13}C_{12}H_2{}^{35}Cl_5{}^{37}ClO$	HxCDF (S)					
	389.8156	M+2	$C_{12}H_2{}^{35}Cl_5{}^{37}ClO_2$	HxCDD					
	391.8127	M+4	$C_{12}H_2{}^{35}Cl_4{}^{37}Cl_2O_2$	HxCDD					
	401.8559	M+2	$^{13}C_{12}H_2{}^{35}Cl_5{}^{37}ClO_2$	HxCDD (S)					
	403.8529	M+4	$^{13}C_{12}H_2{}^{35}Cl_4{}^{37}Cl_2O_2$	HxCDD (S)					
	445.7555	M+4	$C_{12}H_2{}^{35}Cl_6{}^{37}Cl_2O$	OCDPE					
	[430.9728]	LOCK	C_9F_{17}	PFK					

(a) The following nuclidic masses were used:

H = 1.007825	O = 15.994915
C = 12.000000	^{35}Cl = 34.968853
^{13}C = 13.003355	^{37}Cl = 36.965903
F = 18.9984	

S = internal/recovery standard

LDC #: 35340021

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: [signature]

METHOD: HRGC/HRMS Dioxins/Dibenzofurans (EPA SW 846 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 , H :

Conc. = (442)(2000)( ) / (1863336)(1.16X)(10)(0.905)

=

0.044X ng/kg

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

LDC #:
SDG #:

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification (additional page)

Page: of
Reviewer:

SAMPLE DELIVERY GROUP

DX018

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-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162922	N	METHOD	1613B	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162923	N	METHOD	1613B	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162924	N	METHOD	1613B	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162925	N	METHOD	1613B	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162927	N	METHOD	1613B	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162928	N	METHOD	1613B	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162926	N	METHOD	1613B	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162934	N	METHOD	1613B	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162935	N	METHOD	1613B	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162933	N	METHOD	1613B	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162932	N	METHOD	1613B	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162930	N	METHOD	1613B	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162931	N	METHOD	1613B	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162929	N	METHOD	1613B	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162940	N	METHOD	1613B	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162939	N	METHOD	1613B	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162936	N	METHOD	1613B	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162937	N	METHOD	1613B	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162938	N	METHOD	1613B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: PrepDX018_v1

eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-008-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 8:22:00 **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	6770	EB	0.865	MDL	5.18	PQL	ng/Kg	J	*XI
OCDD	130000	EB	0.707	MDL	10.4	PQL	ng/Kg	J	*XI

Sample ID: SL-009-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 8:25:00 **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	2610	EB	0.530	MDL	5.35	PQL	ng/Kg	J	*XI
1,2,3,7,8-PECDF	3.44	JB	0.0412	MDL	5.35	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.887	J	0.0425	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.696	J	0.0713	MDL	1.07	PQL	ng/Kg	J	Z
OCDD	42300	EB	0.464	MDL	10.7	PQL	ng/Kg	J	*XI

Sample ID: SL-017-SA5C-SB-4.0-5.0 **Collected:** 12/9/2010 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
1,2,3,4,6,7,8-HPCDD	0.491	JBQ	0.0523	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.564	JB	0.0753	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0623	JBQ	0.0327	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.105	JB	0.0258	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.132	JB	0.0336	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.149	JB	0.0241	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.305	JBQ	0.0341	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.252	JB	0.0313	MDL	5.54	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0806	JBQ	0.0218	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.163	JBQ	0.0246	MDL	5.54	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.116	JBQ	0.0208	MDL	5.54	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0640	JQ	0.0353	MDL	1.11	PQL	ng/Kg	J	Z
OCDD	2.98	JB	0.0764	MDL	11.1	PQL	ng/Kg	J	Z
OCDF	0.483	JB	0.0837	MDL	11.1	PQL	ng/Kg	U	B

Sample ID: SL-017-SA5C-SB-9.0-10.0 **Collected:** 12/9/2010 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	0.283	JB	0.0736	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.653	JBQ	0.112	MDL	5.59	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX018
EDD Filename: PrepDX018_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method Category: SVOA
Method: 1613B **Matrix:** SO

Sample ID: SL-017-SA5C-SB-9.0-10.0 ***Collected:*** 12/9/2010 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	0.359	JBQ	0.162	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0413	JBQ	0.0402	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.196	JBQ	0.0406	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0862	JBQ	0.0413	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.127	JBQ	0.0362	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0455	JBQ	0.0403	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.126	JBQ	0.0478	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0938	JBQ	0.0560	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0431	JBQ	0.0234	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.173	JBQ	0.0383	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.144	JBQ	0.0230	MDL	5.59	PQL	ng/Kg	U	B
OCDD	1.37	JB	0.112	MDL	11.2	PQL	ng/Kg	U	B
OCDF	0.627	JBQ	0.140	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-048-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 9:03:00 ***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	3.28	JB	0.0210	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.392	JB	0.0334	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.218	JBQ	0.0411	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.281	JB	0.0297	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.670	JB	0.0423	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.299	JB	0.0263	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.573	JB	0.0406	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.155	JBQ	0.0351	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.221	JB	0.0342	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.141	JBQ	0.0150	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.343	JBQ	0.0291	MDL	5.64	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.180	JB	0.0140	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0497	J	0.0191	MDL	1.13	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0618	JQ	0.0213	MDL	1.13	PQL	ng/Kg	J	Z
OCDF	5.21	JB	0.0383	MDL	11.3	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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-HPCDF	5.39	JB	0.0353	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.505	JB	0.0473	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.249	JBQ	0.0372	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.290	JB	0.0266	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.09	JB	0.0385	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.415	JB	0.0238	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.463	JB	0.0396	MDL	5.55	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.161	JB	0.0297	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.163	JBQ	0.0421	MDL	5.55	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.204	JB	0.0159	MDL	5.55	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.396	JBQ	0.0250	MDL	5.55	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.275	JB	0.0152	MDL	5.55	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0235	J	0.0183	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0294	JQ	0.0279	MDL	1.11	PQL	ng/Kg	J	Z
OCDF	11.0	JB	0.0395	MDL	11.1	PQL	ng/Kg	J	Z

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:24:00 *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	4.75	JB	0.0326	MDL	5.74	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.948	JB	0.0146	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.116	JB	0.0241	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0561	JBQ	0.0216	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.137	JB	0.0186	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.163	JBQ	0.0217	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0956	JBQ	0.0160	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.110	JBQ	0.0219	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0862	JBQ	0.0227	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0965	JBQ	0.0256	MDL	5.74	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.114	JB	0.00976	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.159	JB	0.0171	MDL	5.74	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.134	JB	0.00999	MDL	5.74	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0307	JQ	0.0176	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	1.75	JB	0.0247	MDL	11.5	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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-HPCDF	2.36	JB	0.0274	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.249	JBQ	0.0408	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0999	JBQ	0.0296	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.182	JB	0.0207	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.522	JB	0.0293	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.173	JBQ	0.0183	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.279	JB	0.0300	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.132	JBQ	0.0231	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0989	JBQ	0.0414	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.143	JBQ	0.0143	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.239	JB	0.0203	MDL	5.73	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.164	JB	0.0137	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0411	JQ	0.0274	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	6.33	JB	0.0251	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:00:00 *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	0.0546	MDL	5.84	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.846	JB	0.0257	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.123	JBQ	0.0391	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0472	JBQ	0.0325	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0999	JBQ	0.0296	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.179	JB	0.0341	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.107	JBQ	0.0259	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.163	JBQ	0.0327	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.120	JBQ	0.0349	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0847	JBQ	0.0371	MDL	5.84	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0750	JBQ	0.0148	MDL	5.84	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.147	JBQ	0.0283	MDL	5.84	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0950	JB	0.0148	MDL	5.84	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0411	J	0.0238	MDL	1.17	PQL	ng/Kg	J	Z
OCDF	1.45	JB	0.0432	MDL	11.7	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-064-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	2.99	JB	0.0273	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.330	JBQ	0.0385	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.135	JBQ	0.0376	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.235	JBQ	0.0260	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.642	JB	0.0395	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.171	JB	0.0233	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.354	JB	0.0373	MDL	5.60	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.134	JBQ	0.0288	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0736	JB	0.0335	MDL	5.60	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.181	JBQ	0.0139	MDL	5.60	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.297	JB	0.0254	MDL	5.60	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.172	JB	0.0139	MDL	5.60	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0398	JQ	0.0270	MDL	1.12	PQL	ng/Kg	J	Z
OCDF	7.30	JB	0.0372	MDL	11.2	PQL	ng/Kg	J	Z

Sample ID: SL-065-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	2.04	JB	0.0178	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.561	JBQ	0.0221	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.168	JB	0.0268	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	1.02	JB	0.0223	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.05	JB	0.0276	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.639	JB	0.0202	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.538	JB	0.0272	MDL	5.52	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.354	JB	0.0238	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.163	JB	0.0358	MDL	5.52	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.450	JBQ	0.0231	MDL	5.52	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.549	JB	0.0208	MDL	5.52	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	1.28	JB	0.0223	MDL	5.52	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0224	J	0.0189	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.162	J	0.0536	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	3.34	JB	0.0233	MDL	11.0	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-067-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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
1,2,3,4,7,8,9-HPCDF	4.10	JB	0.0542	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.12	JB	0.0512	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.67	JB	0.0538	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.45	JB	0.0505	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.76	JB	0.0528	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.784	JBQ	0.0579	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.63	JBQ	0.0872	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.898	JB	0.0347	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.23	JB	0.0489	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.63	JB	0.0320	MDL	5.39	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.116	JQ	0.0303	MDL	1.08	PQL	ng/Kg	J	Z

Sample ID: SL-070-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:34:00 **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-HPCDF	3.82	JB	0.0163	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.450	JB	0.0206	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.270	JB	0.0261	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.567	JBQ	0.0211	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.985	JB	0.0269	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.415	JB	0.0197	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.625	JBQ	0.0264	MDL	5.89	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.248	JBQ	0.0223	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.189	JBQ	0.0366	MDL	5.89	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.214	JBQ	0.0181	MDL	5.89	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.402	JB	0.0200	MDL	5.89	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.460	JB	0.0166	MDL	5.89	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0425	J	0.0186	MDL	1.18	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0689	JQ	0.0389	MDL	1.18	PQL	ng/Kg	J	Z
OCDF	6.75	JB	0.0218	MDL	11.8	PQL	ng/Kg	J	Z

Sample ID: SL-228-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 9:12:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.619	JB	0.0935	MDL	6.90	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-228-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HXCDF	1.32	JB	0.108	MDL	6.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.74	JB	0.0983	MDL	6.90	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.552	JB	0.0993	MDL	6.90	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.15	JB	0.0997	MDL	6.90	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.617	JB	0.135	MDL	6.90	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.381	JBQ	0.0852	MDL	6.90	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.483	JB	0.0501	MDL	6.90	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.736	JB	0.110	MDL	6.90	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.608	JBQ	0.0459	MDL	6.90	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0541	JQ	0.0361	MDL	1.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.459	JQ	0.0699	MDL	1.38	PQL	ng/Kg	J	Z

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	3.12	JB	0.107	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.91	JB	0.0720	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.05	JB	0.0929	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.90	JB	0.0754	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.29	JB	0.0869	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.04	JB	0.0757	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.274	JBQ	0.107	MDL	5.69	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.06	JB	0.0706	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.286	JBQ	0.0335	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.76	JB	0.0892	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.465	JB	0.0306	MDL	5.69	PQL	ng/Kg	U	B

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *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	3.25	JB	0.0371	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.356	JBQ	0.0533	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.290	JB	0.0444	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.249	JB	0.0343	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.740	JB	0.0459	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.235	JB	0.0295	MDL	5.76	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *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	0.485	JB	0.0432	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.119	JBQ	0.0347	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.208	JB	0.0477	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.147	JB	0.0203	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.333	JB	0.0310	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.464	JB	0.0218	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0772	J	0.0387	MDL	1.15	PQL	ng/Kg	J	Z
OCDF	6.53	JB	0.0435	MDL	11.5	PQL	ng/Kg	J	Z

Sample ID: SL-233-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:46:00 *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-HPCDF	2.07	JB	0.0210	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.368	JB	0.0341	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.113	JB	0.0285	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.165	JB	0.0204	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.458	JB	0.0300	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.162	JB	0.0174	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.242	JB	0.0295	MDL	5.68	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.135	JB	0.0246	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0704	JBQ	0.0294	MDL	5.68	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.152	JBQ	0.0123	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.233	JB	0.0195	MDL	5.68	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.183	JBQ	0.0132	MDL	5.68	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0292	JQ	0.0198	MDL	1.14	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0290	JQ	0.0243	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	4.71	JB	0.0341	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 10:49:00 *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	0.0242	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.172	JBQ	0.0372	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0567	JBQ	0.0362	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.132	JBQ	0.0261	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.250	JB	0.0373	MDL	5.79	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 10:49:00 *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	0.0951	JBQ	0.0225	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.141	JBQ	0.0370	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.112	JBQ	0.0290	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0696	JBQ	0.0392	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.114	JBQ	0.0152	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.169	JBQ	0.0255	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.128	JBQ	0.0149	MDL	5.79	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0339	JQ	0.0260	MDL	1.16	PQL	ng/Kg	J	Z
OCDF	2.23	JB	0.0375	MDL	11.6	PQL	ng/Kg	U	B

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:04:00 *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	0.0346	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.203	JBQ	0.0597	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.175	JBQ	0.0369	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.222	JB	0.0485	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.117	JBQ	0.0315	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.155	JB	0.0460	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.120	JB	0.0331	MDL	6.03	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0791	JBQ	0.0210	MDL	6.03	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.201	JB	0.0332	MDL	6.03	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.221	JBQ	0.0212	MDL	6.03	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0211	JQ	0.0204	MDL	1.21	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0409	JQ	0.0300	MDL	1.21	PQL	ng/Kg	J	Z
OCDF	2.83	JB	0.0758	MDL	12.1	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_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
*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	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: PrepDX018_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX018

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DX018
EDD Filename: DX018_v1.

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 1613B **Preparation Method: METHOD**
Matrix: SO

Sample ID	Type	Actual	Criteria	Units	Flag
SL-008-SA5B-SS-0.0-0.5 (REA)	Extraction To Analysis	63.00	45.00	DAYS	J (all detects)
SL-067-SA5B-SS-0.0-0.5 (REA)		63.00	45.00	DAYS	UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: DX018_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB372135	12/29/2010 9:35:00 PM	1,2,3,4,6,7,8-HPCDD	0.225 ng/Kg	SL-008-SA5B-SS-0.0-0.5
		1,2,3,4,6,7,8-HPCDF	0.483 ng/Kg	SL-009-SA5B-SS-0.0-0.5
		1;2,3,4,7,8,9-HPCDF	0.172 ng/Kg	SL-017-SA5C-SB-4.0-5.0
		1,2,3,4,7,8-HxCDD	0.0392 ng/Kg	SL-017-SA5C-SB-9.0-10.0
		1,2,3,4,7,8-HXCDF	0.100 ng/Kg	SL-048-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.0962 ng/Kg	SL-051-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0790 ng/Kg	SL-059-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0393 ng/Kg	SL-061-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.137 ng/Kg	SL-062-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0565 ng/Kg	SL-064-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0326 ng/Kg	SL-065-SA5B-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.197 ng/Kg	SL-067-SA5B-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.148 ng/Kg	SL-070-SA5B-SS-0.0-0.5
		OCDD	0.461 ng/Kg	SL-228-SA5B-SS-0.0-0.5
		OCDF	0.458 ng/Kg	SL-229-SA5B-SS-0.0-0.5
				SL-232-SA5B-SS-0.0-0.5
				SL-233-SA5B-SS-0.0-0.5
				SL-299-SA5B-SS-0.0-0.5
				SL-300-SA5B-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-017-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.491 ng/Kg	0.491U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.564 ng/Kg	0.564U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0623 ng/Kg	0.0623U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.105 ng/Kg	0.105U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDD	0.132 ng/Kg	0.132U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.149 ng/Kg	0.149U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.252 ng/Kg	0.252U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0806 ng/Kg	0.0806U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.163 ng/Kg	0.163U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.116 ng/Kg	0.116U ng/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	OCDF	0.483 ng/Kg	0.483U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.283 ng/Kg	0.283U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.653 ng/Kg	0.653U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.359 ng/Kg	0.359U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0413 ng/Kg	0.0413U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0862 ng/Kg	0.0862U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.127 ng/Kg	0.127U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0455 ng/Kg	0.0455U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.126 ng/Kg	0.126U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0938 ng/Kg	0.0938U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0431 ng/Kg	0.0431U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.144 ng/Kg	0.144U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	OCDD	1.37 ng/Kg	1.37U ng/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	OCDF	0.627 ng/Kg	0.627U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.392 ng/Kg	0.392U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX018 **Laboratory: LL**

EDD Filename: DX018_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-048-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.281 ng/Kg	0.281U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.299 ng/Kg	0.299U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.221 ng/Kg	0.221U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.141 ng/Kg	0.141U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.343 ng/Kg	0.343U ng/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.180 ng/Kg	0.180U ng/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.505 ng/Kg	0.505U ng/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.290 ng/Kg	0.290U ng/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.163 ng/Kg	0.163U ng/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.398 ng/Kg	0.398U ng/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.275 ng/Kg	0.275U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.948 ng/Kg	0.948U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.116 ng/Kg	0.116U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0561 ng/Kg	0.0561U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.137 ng/Kg	0.137U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.163 ng/Kg	0.163U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0956 ng/Kg	0.0956U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.110 ng/Kg	0.110U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0862 ng/Kg	0.0862U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0965 ng/Kg	0.0965U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.114 ng/Kg	0.114U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.159 ng/Kg	0.159U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.134 ng/Kg	0.134U ng/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	OCDF	1.75 ng/Kg	1.75U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.36 ng/Kg	2.36U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.249 ng/Kg	0.249U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0999 ng/Kg	0.0999U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.182 ng/Kg	0.182U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.173 ng/Kg	0.173U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0989 ng/Kg	0.0989U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.143 ng/Kg	0.143U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.239 ng/Kg	0.239U ng/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.164 ng/Kg	0.164U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.846 ng/Kg	0.846U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.123 ng/Kg	0.123U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0472 ng/Kg	0.0472U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0999 ng/Kg	0.0999U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_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-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.179 ng/Kg	0.179U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.107 ng/Kg	0.107U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.163 ng/Kg	0.163U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0847 ng/Kg	0.0847U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0750 ng/Kg	0.0750U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.147 ng/Kg	0.147U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0950 ng/Kg	0.0950U ng/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	OCDF	1.45 ng/Kg	1.45U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.330 ng/Kg	0.330U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.135 ng/Kg	0.135U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.235 ng/Kg	0.235U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.171 ng/Kg	0.171U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.134 ng/Kg	0.134U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0736 ng/Kg	0.0736U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.297 ng/Kg	0.297U ng/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.172 ng/Kg	0.172U ng/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.04 ng/Kg	2.04U ng/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.561 ng/Kg	0.561U ng/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.168 ng/Kg	0.168U ng/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.354 ng/Kg	0.354U ng/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.163 ng/Kg	0.163U ng/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.549 ng/Kg	0.549U ng/Kg
SL-070-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.450 ng/Kg	0.450U ng/Kg
SL-070-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.248 ng/Kg	0.248U ng/Kg
SL-070-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.189 ng/Kg	0.189U ng/Kg
SL-070-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.402 ng/Kg	0.402U ng/Kg
SL-070-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.460 ng/Kg	0.460U ng/Kg
SL-228-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.617 ng/Kg	0.617U ng/Kg
SL-228-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.736 ng/Kg	0.736U ng/Kg
SL-228-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.608 ng/Kg	0.608U ng/Kg
SL-229-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.274 ng/Kg	0.274U ng/Kg
SL-229-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.465 ng/Kg	0.465U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.356 ng/Kg	0.356U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.249 ng/Kg	0.249U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.235 ng/Kg	0.235U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.119 ng/Kg	0.119U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.208 ng/Kg	0.208U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.147 ng/Kg	0.147U ng/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.333 ng/Kg	0.333U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_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-232-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.464 ng/Kg	0.464U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	2.07 ng/Kg	2.07U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.368 ng/Kg	0.368U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.113 ng/Kg	0.113U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.165 ng/Kg	0.165U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.458 ng/Kg	0.458U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.162 ng/Kg	0.162U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0704 ng/Kg	0.0704U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.152 ng/Kg	0.152U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.233 ng/Kg	0.233U ng/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.183 ng/Kg	0.183U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.25 ng/Kg	1.25U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.172 ng/Kg	0.172U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0567 ng/Kg	0.0567U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.250 ng/Kg	0.250U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0951 ng/Kg	0.0951U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.141 ng/Kg	0.141U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0696 ng/Kg	0.0696U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.114 ng/Kg	0.114U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.169 ng/Kg	0.169U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.128 ng/Kg	0.128U ng/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	OCDF	2.23 ng/Kg	2.23U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.30 ng/Kg	1.30U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.203 ng/Kg	0.203U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.175 ng/Kg	0.175U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.222 ng/Kg	0.222U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.117 ng/Kg	0.117U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.155 ng/Kg	0.155U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0791 ng/Kg	0.0791U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.201 ng/Kg	0.201U ng/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.221 ng/Kg	0.221U ng/Kg

Reporting Limit Outliers

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_v1.

eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5B-SS-0.0-0.5	1,2,3,7,8-PECDF	JB	3.44	5.35	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.887	1.07	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDF	J	0.696	1.07	PQL	ng/Kg	
SL-017-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.491	5.54	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.564	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0623	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.105	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.132	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.149	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.305	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.252	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.0806	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.163	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.116	5.54	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0640	1.11	PQL	ng/Kg	
	OCDD	JB	2.98	11.1	PQL	ng/Kg	
	OCDF	JB	0.483	11.1	PQL	ng/Kg	
SL-017-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.283	5.59	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.653	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.359	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0413	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.196	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0862	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.127	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0455	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.126	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0938	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0431	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.173	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.144	5.59	PQL	ng/Kg	
	OCDD	JB	1.37	11.2	PQL	ng/Kg	
	OCDF	JBQ	0.627	11.2	PQL	ng/Kg	
SL-048-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.28	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.392	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.218	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.281	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.670	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.299	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.573	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.155	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.221	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.141	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.343	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.180	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0497	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0618	1.13	PQL	ng/Kg	
	OCDF	JB	5.21	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_v1.

eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-051-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	5.39	5.55	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.505	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.249	5.55	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.290	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.09	5.55	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.415	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.463	5.55	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.161	5.55	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.163	5.55	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.204	5.55	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.396	5.55	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.275	5.55	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0235	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0294	1.11	PQL	ng/Kg	
	OCDF	JB	11.0	11.1	PQL	ng/Kg	
SL-059-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.75	5.74	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.948	5.74	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.116	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0561	5.74	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.137	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.163	5.74	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0956	5.74	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.110	5.74	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0862	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0965	5.74	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.114	5.74	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.159	5.74	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.134	5.74	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0307	1.15	PQL	ng/Kg	
	OCDF	JB	1.75	11.5	PQL	ng/Kg	
SL-061-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.36	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.249	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0999	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.182	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.522	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.173	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.279	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.132	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0989	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.143	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.239	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.164	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0411	1.15	PQL	ng/Kg	
	OCDF	JB	6.33	11.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_v1.

eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-062-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.55	5.84	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.846	5.84	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.123	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0472	5.84	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0999	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.179	5.84	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.107	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.163	5.84	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.120	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0847	5.84	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0750	5.84	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.147	5.84	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0950	5.84	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0411	1.17	PQL	ng/Kg	
	OCDF	JB	1.45	11.7	PQL	ng/Kg	
SL-064-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.99	5.60	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.330	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.135	5.60	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.235	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.642	5.60	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.171	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.354	5.60	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.134	5.60	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0736	5.60	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.181	5.60	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.297	5.60	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.172	5.60	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0398	1.12	PQL	ng/Kg	
	OCDF	JB	7.30	11.2	PQL	ng/Kg	
SL-065-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.04	5.52	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.561	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.168	5.52	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.02	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.05	5.52	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.639	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.538	5.52	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.354	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.163	5.52	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.450	5.52	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.549	5.52	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.28	5.52	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0224	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.162	1.10	PQL	ng/Kg	
	OCDF	JB	3.34	11.0	PQL	ng/Kg	
SL-067-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	4.10	5.39	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.12	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.67	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.45	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.76	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.784	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	1.63	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.898	5.39	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.23	5.39	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.63	5.39	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.116	1.08	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_v1.

eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-070-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.82	5.89	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.450	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.270	5.89	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.567	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.985	5.89	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.415	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.625	5.89	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.248	5.89	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.189	5.89	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.214	5.89	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.402	5.89	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.460	5.89	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0425	1.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0689	1.18	PQL	ng/Kg	
	OCDF	JB	6.75	11.8	PQL	ng/Kg	
SL-228-SA5B-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	JB	0.619	6.90	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.32	6.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.74	6.90	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.552	6.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.15	6.90	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.617	6.90	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.381	6.90	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.483	6.90	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.736	6.90	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.608	6.90	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0541	1.38	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.459	1.38	PQL	ng/Kg	
SL-229-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.12	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.91	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.05	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.90	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.29	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.04	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.274	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.06	5.69	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.286	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.76	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.465	5.69	PQL	ng/Kg	
SL-232-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.25	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.356	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.290	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.249	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.740	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.235	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.485	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.119	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.208	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.147	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.333	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.464	5.76	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0772	1.15	PQL	ng/Kg	
	OCDF	JB	6.53	11.5	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX018

Laboratory: LL

EDD Filename: DX018_v1.

eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	2.07	5.68	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.368	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.113	5.68	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.165	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.458	5.68	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.162	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.242	5.68	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.135	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0704	5.68	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.152	5.68	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.233	5.68	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.183	5.68	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0292	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0290	1.14	PQL	ng/Kg	
	OCDF	JB	4.71	11.4	PQL	ng/Kg	
SL-299-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.25	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.172	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0567	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.132	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.250	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0951	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.141	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.112	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0696	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.114	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.169	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.128	5.79	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0339	1.16	PQL	ng/Kg	
	OCDF	JB	2.23	11.6	PQL	ng/Kg	
SL-300-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.30	6.03	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.203	6.03	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.175	6.03	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.222	6.03	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.117	6.03	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.155	6.03	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.120	6.03	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0791	6.03	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.201	6.03	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.221	6.03	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0211	1.21	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0409	1.21	PQL	ng/Kg	
	OCDF	JB	2.83	12.1	PQL	ng/Kg	

LDC #: 25340P21

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: CAL
2nd Reviewer: [illegible]

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

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	Compound	Finding	Associated Samples	Qualifications
		1,2,3,4,6,7,8-HpCDD	> calibration range	SL-008-SA5B-SS-0.0-0.5	J det /P
		OCDD		↓-009- ↓ ↓ ↓	

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25240P21

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: A
2nd Reviewer:

METHOD: GC/MS Dioxins/Dibenzofurans (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	Qualifications
		SL-008-SASB-53-0.0-0.5	Results from column	-	R/A
		↓-067-↓ ↓ ↓	SP2331	-	↓

Comments: _____

SAMPLE DELIVERY GROUP

DX019

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-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162966	N	METHOD	1613B	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162967	FD	METHOD	1613B	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162961	N	METHOD	1613B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162963	N	METHOD	1613B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162964	MS	METHOD	1613B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162965	MSD	METHOD	1613B	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162962	N	METHOD	1613B	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162975	N	METHOD	1613B	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162968	N	METHOD	1613B	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162974	N	METHOD	1613B	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162969	N	METHOD	1613B	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162972	N	METHOD	1613B	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162973	N	METHOD	1613B	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162970	N	METHOD	1613B	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162971	N	METHOD	1613B	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162978	N	METHOD	1613B	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162979	N	METHOD	1613B	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162976	N	METHOD	1613B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162977	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: DX019 **Laboratory:** LL

EDD Filename: DX019_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 ***Collected:*** 12/10/2010 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	1.76	JB	0.0297	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.475	JBQ	0.0117	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0568	JBQ	0.0203	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0616	JB	0.0187	MDL	5.25	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0978	JB	0.0163	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.101	JBQ	0.0192	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0837	JBQ	0.0136	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.103	JB	0.0189	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0698	JB	0.0201	MDL	5.25	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0979	JB	0.0271	MDL	5.25	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0829	JBQ	0.00966	MDL	5.25	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0908	JBQ	0.0163	MDL	5.25	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.103	JB	0.00966	MDL	5.25	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0263	JQ	0.0202	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0207	J	0.0182	MDL	1.05	PQL	ng/Kg	J	Z, FD
OCDF	0.728	JBQ	0.0298	MDL	10.5	PQL	ng/Kg	U	B

Sample ID: SL-005-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 3:29:00 ***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	0.599	JB	0.0416	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.265	JBQ	0.0167	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0365	JBQ	0.0276	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0673	JBQ	0.0249	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.187	JB	0.0259	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0681	JB	0.0211	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.355	JB	0.0249	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.342	JB	0.0290	MDL	5.76	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0880	JB	0.0339	MDL	5.76	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.263	JB	0.0141	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0841	JBQ	0.0232	MDL	5.76	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.107	JBQ	0.0147	MDL	5.76	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0254	JQ	0.0226	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0287	JQ	0.0240	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	4.14	JB	0.0449	MDL	11.5	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 3:29:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
OCDF	0.400	JB	0.0403	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *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	1.12	JB	0.0285	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.188	JB	0.0393	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0778	JBQ	0.0377	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.122	JB	0.0252	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.369	JB	0.0389	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.118	JB	0.0230	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.299	JB	0.0377	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.216	JB	0.0276	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0651	JBQ	0.0309	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.104	JB	0.0123	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.149	JB	0.0238	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.119	JB	0.0121	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0433	J	0.0228	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	2.74	JB	0.0383	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *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	0.316	JBQ	0.0381	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.281	JB	0.0160	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0802	JBQ	0.0252	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0557	JB	0.0246	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.129	JB	0.0203	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.207	JBQ	0.0254	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.115	JBQ	0.0183	MDL	5.75	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.434	JB	0.0247	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.373	JB	0.0232	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.246	JB	0.0348	MDL	5.75	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.498	JBQ	0.0131	MDL	5.75	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.114	JBQ	0.0194	MDL	5.75	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.286	JBQ	0.0130	MDL	5.75	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *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	0.145	JQ	0.0231	MDL	1.15	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.172	J	0.0217	MDL	1.15	PQL	ng/Kg	J	Z
OCDD	2.45	JB	0.0468	MDL	11.5	PQL	ng/Kg	U	B
OCDF	0.229	JB	0.0399	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SL-008-SA5C-SB-8.0-9.0 *Collected:* 12/10/2010 12:22:00 *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	5.21	JB	0.0369	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.670	JB	0.0123	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.192	JBQ	0.0174	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0671	JB	0.0246	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.108	JBQ	0.0175	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.113	JBQ	0.0251	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0954	JB	0.0153	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.125	JB	0.0248	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0771	JBQ	0.0195	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0324	JBQ	0.0227	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0471	JB	0.00909	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.126	JB	0.0159	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0588	JBQ	0.00876	MDL	5.48	PQL	ng/Kg	U	B
OCDF	0.906	JB	0.0273	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *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	3.08	JB	0.0306	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.873	JB	0.0137	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.110	JBQ	0.0186	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0473	JBQ	0.0240	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0872	JBQ	0.0163	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.196	JB	0.0249	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.102	JB	0.0147	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.156	JB	0.0241	MDL	5.35	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.120	JBQ	0.0175	MDL	5.35	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0531	JBQ	0.0218	MDL	5.35	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *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	0.0731	JB	0.0102	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.128	JB	0.0154	MDL	5.35	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.167	JB	0.0101	MDL	5.35	PQL	ng/Kg	U	B
OCDF	1.60	JB	0.0240	MDL	10.7	PQL	ng/Kg	J	Z

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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	4.02	JB	0.0361	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.606	JBQ	0.0136	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0940	JB	0.0223	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0475	JBQ	0.0264	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0687	JB	0.0191	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.209	JB	0.0271	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0694	JB	0.0167	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.150	JBQ	0.0262	MDL	5.59	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.118	JB	0.0216	MDL	5.59	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0591	JBQ	0.0111	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.112	JBQ	0.0188	MDL	5.59	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0701	JB	0.0115	MDL	5.59	PQL	ng/Kg	U	B
OCDF	1.11	JB	0.0348	MDL	11.2	PQL	ng/Kg	U	B

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 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-HPCDF	1.46	JB	0.0247	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.170	JBQ	0.0404	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0979	JBQ	0.0469	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.132	JB	0.0303	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.389	JB	0.0461	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.148	JB	0.0250	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.337	JBQ	0.0479	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.228	JB	0.0329	MDL	5.71	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0994	JBQ	0.0339	MDL	5.71	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.111	JBQ	0.0138	MDL	5.71	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.150	JBQ	0.0282	MDL	5.71	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory:** LL

EDD Filename: DX019_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-010-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 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
2,3,4,7,8-PECDF	0.115	JB	0.0142	MDL	5.71	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0332	JQ	0.0220	MDL	1.14	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0272	JQ	0.0271	MDL	1.14	PQL	ng/Kg	J	Z
OCDF	3.07	JB	0.0443	MDL	11.4	PQL	ng/Kg	J	Z

Sample ID: SL-010-SA5C-SB-9.0-10.0 ***Collected:*** 12/10/2010 11:03:00 ***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	1.73	JB	0.0366	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.332	JB	0.0146	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0747	JBQ	0.0283	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0396	JB	0.0246	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0865	JB	0.0198	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0683	JBQ	0.0260	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0503	JB	0.0152	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0838	JB	0.0248	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.100	JB	0.0245	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0654	JBQ	0.0290	MDL	5.48	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0521	JBQ	0.0107	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0951	JBQ	0.0193	MDL	5.48	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0749	JB	0.0119	MDL	5.48	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0361	JQ	0.0230	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0285	JQ	0.0207	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	0.528	JB	0.0452	MDL	11.0	PQL	ng/Kg	U	B

Sample ID: SL-011-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 9:39:00 ***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	0.945	JB	0.0162	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.149	JB	0.0206	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0742	JBQ	0.0281	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.103	JB	0.0200	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.290	JB	0.0285	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0931	JBQ	0.0182	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.234	JBQ	0.0277	MDL	5.50	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.165	JB	0.0204	MDL	5.50	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory:** LL

EDD Filename: DX019_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-011-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 9:39:00 ***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	0.0882	JBQ	0.0261	MDL	5.50	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0947	JBQ	0.0113	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.127	JB	0.0193	MDL	5.50	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.149	JBQ	0.0110	MDL	5.50	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0209	J	0.0166	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0371	JQ	0.0213	MDL	1.10	PQL	ng/Kg	J	Z
OCDF	1.75	JB	0.0306	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-011-SA5C-SB-9.0-10.0 ***Collected:*** 12/10/2010 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-HPCDF	1.17	JB	0.0182	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.142	JBQ	0.0256	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.102	JBQ	0.0326	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0995	JBQ	0.0236	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.345	JB	0.0340	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.110	JBQ	0.0211	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.230	JB	0.0337	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.122	JBQ	0.0266	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0832	JBQ	0.0131	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.161	JB	0.0231	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.158	JB	0.0127	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0282	JQ	0.0224	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	2.59	JB	0.0372	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-057-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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-HPCDF	0.890	JB	0.0239	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.105	JBQ	0.0336	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0583	JBQ	0.0298	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0702	JBQ	0.0196	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.230	JB	0.0306	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0620	JBQ	0.0169	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.207	JB	0.0287	MDL	5.79	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0902	JBQ	0.0207	MDL	5.79	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory:** LL

EDD Filename: DX019_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-057-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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
1,2,3,7,8-PECDD	0.0627	JBQ	0.0321	MDL	5.79	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.102	JBQ	0.0117	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0885	JB	0.0189	MDL	5.79	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.118	JBQ	0.0114	MDL	5.79	PQL	ng/Kg	U	B
OCDF	2.48	JB	0.0291	MDL	11.6	PQL	ng/Kg	J	Z

Sample ID: SL-234-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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
1,2,3,4,7,8,9-HPCDF	0.842	JB	0.0377	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.574	JBQ	0.0386	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.287	JB	0.0282	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.72	JB	0.0396	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.339	JB	0.0264	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.09	JB	0.0386	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.156	JBQ	0.0309	MDL	5.47	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.241	JB	0.0522	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.191	JB	0.0182	MDL	5.47	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.550	JB	0.0267	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.251	JB	0.0176	MDL	5.47	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0595	JQ	0.0269	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0478	JQ	0.0289	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-235-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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-HXCDF	2.92	JB	0.0631	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	4.08	JB	0.0596	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.879	JB	0.0639	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	3.40	JB	0.0705	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.741	JB	0.0235	MDL	5.41	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.41	JB	0.0214	MDL	5.41	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.391	JQ	0.0364	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.180	J	0.0576	MDL	1.08	PQL	ng/Kg	J	Z
OCDD	8490	EB	0.239	MDL	10.8	PQL	ng/Kg	J	*XI

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory:** LL

EDD Filename: DX019_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	4.73	JB	0.0242	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.479	JB	0.0338	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.364	JB	0.0355	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.272	JB	0.0232	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.948	JB	0.0363	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.319	JB	0.0211	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.811	JB	0.0359	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.108	JBQ	0.0256	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.199	JBQ	0.0386	MDL	5.41	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.159	JB	0.0146	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.364	JBQ	0.0216	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.185	JBQ	0.0139	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0338	JQ	0.0213	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0571	JQ	0.0241	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	8.60	JB	0.0339	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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-HPCDD	2.27	JB	0.0357	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.612	JB	0.0130	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0805	JB	0.0210	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0327	JBQ	0.0219	MDL	5.22	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HXCDF	0.0769	JB	0.0181	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.139	JBQ	0.0223	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0609	JB	0.0155	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.107	JBQ	0.0224	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0487	JBQ	0.0223	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0375	JBQ	0.0232	MDL	5.22	PQL	ng/Kg	UJ	B, FD
1,2,3,7,8-PECDF	0.0329	JBQ	0.0100	MDL	5.22	PQL	ng/Kg	UJ	B, FD
2,3,4,6,7,8-HXCDF	0.0989	JB	0.0176	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0681	JB	0.0108	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0189	JQ	0.0189	MDL	1.04	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0185	U	0.0185	MDL	1.04	PQL	ng/Kg	UJ	FD
OCDF	1.06	JB	0.0343	MDL	10.4	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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-HPCDF	3.91	JB	0.0186	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.300	JB	0.0286	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.247	JB	0.0392	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.278	JB	0.0259	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.776	JB	0.0405	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.223	JBQ	0.0225	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.393	JB	0.0398	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.156	JB	0.0289	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.180	JBQ	0.0344	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.0991	JB	0.0150	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.248	JB	0.0248	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.273	JB	0.0149	MDL	5.36	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0419	JQ	0.0247	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.0309	J	0.0231	MDL	1.07	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_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
*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	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX019

Method Blank Outlier Report

Lab Reporting Batch ID: DX019 **Laboratory:** LL

EDD Filename: DX019_v1. **eQAPP Name:** CDM_SSFL_110509

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371400	1/4/2011 2:00:00 PM	1,2,3,4,6,7,8-HPCDD	0.149 ng/Kg	DUP03-SA5B-QC-121010
		1,2,3,4,6,7,8-HPCDF	0.210 ng/Kg	SL-005-SA5C-SB-4.0-5.0
		1,2,3,4,7,8,9-HPCDF	0.0776 ng/Kg	SL-005-SA5C-SB-9.0-10.0
		1,2,3,4,7,8-HxCDD	0.0307 ng/Kg	SL-008-SA5C-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0530 ng/Kg	SL-008-SA5C-SB-8.0-9.0
		1,2,3,6,7,8-HXCDD	0.0353 ng/Kg	SL-009-SA5C-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0541 ng/Kg	SL-009-SA5C-SB-9.0-10.0
		1,2,3,7,8,9-HXCDD	0.0281 ng/Kg	SL-010-SA5C-SB-4.0-5.0
		1,2,3,7,8,9-HXCDF	0.0334 ng/Kg	SL-010-SA5C-SB-9.0-10.0
		1,2,3,7,8-PECDD	0.0355 ng/Kg	SL-011-SA5C-SB-4.0-5.0
		1,2,3,7,8-PECDF	0.0537 ng/Kg	SL-011-SA5C-SB-9.0-10.0
		2,3,4,6,7,8-HXCDF	0.0767 ng/Kg	SL-057-SA5B-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0578 ng/Kg	SL-234-SA5B-SS-0.0-0.5
		OCDD	0.512 ng/Kg	SL-235-SA5B-SS-0.0-0.5
		OCDF	0.246 ng/Kg	SL-287-SA5B-SS-0.0-0.5
				SL-288-SA5B-SS-0.0-0.5
				SL-290-SA5B-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
DUP03-SA5B-QC-121010(RES)	1,2,3,4,6,7,8-HPCDF	0.475 ng/Kg	0.475U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,4,7,8,9-HPCDF	0.0568 ng/Kg	0.0566U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,4,7,8-HxCDD	0.0616 ng/Kg	0.0616U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,4,7,8-HXCDF	0.0978 ng/Kg	0.0978U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,6,7,8-HXCDD	0.101 ng/Kg	0.101U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,6,7,8-HXCDF	0.0837 ng/Kg	0.0837U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,7,8,9-HXCDD	0.103 ng/Kg	0.103U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,7,8,9-HXCDF	0.0698 ng/Kg	0.0698U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,7,8-PECDD	0.0979 ng/Kg	0.0979U ng/Kg
DUP03-SA5B-QC-121010(RES)	1,2,3,7,8-PECDF	0.0829 ng/Kg	0.0829U ng/Kg
DUP03-SA5B-QC-121010(RES)	2,3,4,6,7,8-HXCDF	0.0908 ng/Kg	0.0908U ng/Kg
DUP03-SA5B-QC-121010(RES)	2,3,4,7,8-PECDF	0.103 ng/Kg	0.103U ng/Kg
DUP03-SA5B-QC-121010(RES)	OCDF	0.728 ng/Kg	0.728U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.599 ng/Kg	0.599U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.265 ng/Kg	0.265U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0365 ng/Kg	0.0365U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0673 ng/Kg	0.0673U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0880 ng/Kg	0.0880U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.263 ng/Kg	0.263U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0841 ng/Kg	0.0841U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.107 ng/Kg	0.107U ng/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	OCDF	0.400 ng/Kg	0.400U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.188 ng/Kg	0.188U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0778 ng/Kg	0.0776U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0651 ng/Kg	0.0651U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.104 ng/Kg	0.104U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_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-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.149 ng/Kg	0.149U ng/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.119 ng/Kg	0.119U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.316 ng/Kg	0.316U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.281 ng/Kg	0.281U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0802 ng/Kg	0.0802U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0557 ng/Kg	0.0557U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.129 ng/Kg	0.129U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.115 ng/Kg	0.115U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.114 ng/Kg	0.114U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.286 ng/Kg	0.286U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	OCDD	2.45 ng/Kg	2.45U ng/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	OCDF	0.229 ng/Kg	0.229U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,4,6,7,8-HPCDF	0.670 ng/Kg	0.670U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,4,7,8,9-HPCDF	0.192 ng/Kg	0.192U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,4,7,8-HxCDD	0.0671 ng/Kg	0.0671U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,4,7,8-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,8,7,8-HXCDD	0.113 ng/Kg	0.113U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,6,7,8-HXCDF	0.0954 ng/Kg	0.0954U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDD	0.125 ng/Kg	0.125U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,7,8,9-HXCDF	0.0771 ng/Kg	0.0771U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,7,8-PECDD	0.0324 ng/Kg	0.0324U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	1,2,3,7,8-PECDF	0.0471 ng/Kg	0.0471U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	2,3,4,6,7,8-HXCDF	0.126 ng/Kg	0.126U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	2,3,4,7,8-PECDF	0.0586 ng/Kg	0.0588U ng/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	OCDF	0.906 ng/Kg	0.906U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.873 ng/Kg	0.873U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.110 ng/Kg	0.110U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0473 ng/Kg	0.0473U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0872 ng/Kg	0.0872U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.102 ng/Kg	0.102U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.120 ng/Kg	0.120U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0531 ng/Kg	0.0531U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0731 ng/Kg	0.0731U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.167 ng/Kg	0.167U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.606 ng/Kg	0.606U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0940 ng/Kg	0.0940U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0475 ng/Kg	0.0475U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0687 ng/Kg	0.0687U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0694 ng/Kg	0.0694U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX019 Laboratory: LL

EDD Filename: DX019_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-009-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.118 ng/Kg	0.118U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0591 ng/Kg	0.0591U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.112 ng/Kg	0.112U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0701 ng/Kg	0.0701U ng/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	OCDF	1.11 ng/Kg	1.11U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.170 ng/Kg	0.170U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0979 ng/Kg	0.0979U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.132 ng/Kg	0.132U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.148 ng/Kg	0.148U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0994 ng/Kg	0.0994U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.111 ng/Kg	0.111U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.115 ng/Kg	0.115U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDF	0.332 ng/Kg	0.332U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0747 ng/Kg	0.0747U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0396 ng/Kg	0.0396U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0865 ng/Kg	0.0865U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0683 ng/Kg	0.0883U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.0503 ng/Kg	0.0503U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0838 ng/Kg	0.0838U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.100 ng/Kg	0.100U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0654 ng/Kg	0.0654U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0521 ng/Kg	0.0521U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.0951 ng/Kg	0.0951U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.0749 ng/Kg	0.0749U ng/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	OCDF	0.528 ng/Kg	0.528U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.945 ng/Kg	0.945U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.149 ng/Kg	0.149U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0742 ng/Kg	0.0742U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.103 ng/Kg	0.103U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0931 ng/Kg	0.0931U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.165 ng/Kg	0.165U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0882 ng/Kg	0.0882U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0947 ng/Kg	0.0947U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.127 ng/Kg	0.127U ng/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.149 ng/Kg	0.149U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.102 ng/Kg	0.102U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.0995 ng/Kg	0.0995U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.110 ng/Kg	0.110U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_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-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.122 ng/Kg	0.122U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0832 ng/Kg	0.0832U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.158 ng/Kg	0.158U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.890 ng/Kg	0.890U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.105 ng/Kg	0.105U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0583 ng/Kg	0.0583U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0702 ng/Kg	0.0702U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0620 ng/Kg	0.0620U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0902 ng/Kg	0.0902U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0627 ng/Kg	0.0627U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.102 ng/Kg	0.102U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0885 ng/Kg	0.0885U ng/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.118 ng/Kg	0.118U ng/Kg
SL-234-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.156 ng/Kg	0.156U ng/Kg
SL-234-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.191 ng/Kg	0.191U ng/Kg
SL-234-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.251 ng/Kg	0.251U ng/Kg
SL-287-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.108 ng/Kg	0.108U ng/Kg
SL-287-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.159 ng/Kg	0.159U ng/Kg
SL-287-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.364 ng/Kg	0.364U ng/Kg
SL-287-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.185 ng/Kg	0.185U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.612 ng/Kg	0.612U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0805 ng/Kg	0.0805U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0327 ng/Kg	0.0327U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0769 ng/Kg	0.0769U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.139 ng/Kg	0.139U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0609 ng/Kg	0.0609U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.107 ng/Kg	0.107U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0487 ng/Kg	0.0487U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0375 ng/Kg	0.0375U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0329 ng/Kg	0.0329U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0989 ng/Kg	0.0989U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0681 ng/Kg	0.0681U ng/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	OCDF	1.06 ng/Kg	1.06U ng/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.300 ng/Kg	0.300U ng/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.223 ng/Kg	0.223U ng/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.156 ng/Kg	0.156U ng/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0991 ng/Kg	0.0991U ng/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.248 ng/Kg	0.248U ng/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.273 ng/Kg	0.273U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
MOISTURE	4.3	4.8	11		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
1,2,3,4,6,7,8-HPCDD	2.27	1.76	25	50.00	
1,2,3,4,6,7,8-HPCDF	0.612	0.475	25	50.00	
1,2,3,4,7,8,9-HPCDF	0.0805	0.0568	35	50.00	
1,2,3,4,7,8-HXCDF	0.0769	0.0978	24	50.00	
1,2,3,6,7,8-HXCDD	0.139	0.101	32	50.00	
1,2,3,6,7,8-HXCDF	0.0609	0.0837	32	50.00	
1,2,3,7,8,9-HXCDD	0.107	0.103	4	50.00	No Qualifiers Applied
1,2,3,7,8,9-HXCDF	0.0487	0.0698	36	50.00	
2,3,4,6,7,8-HXCDF	0.0989	0.0908	9	50.00	
2,3,4,7,8-PECDF	0.0681	0.103	41	50.00	
2,3,7,8-TCDD	0.0189	0.0263	33	50.00	
OCDD	21.7	18.7	15	50.00	
OCDF	1.06	0.728	37	50.00	
1,2,3,4,7,8-HxCDD	0.0327	0.0616	61	50.00	
1,2,3,7,8-PECDD	0.0375	0.0979	89	50.00	J(all detects)
1,2,3,7,8-PECDF	0.0329	0.0829	86	50.00	UJ(all non-detects)
2,3,7,8-TCDF	1.04 U	0.0207	200	50.00	

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	1,2,3,4,6,7,8-HPCDD	JB	1.76	5.25	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.475	5.25	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0568	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0616	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0978	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.101	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0837	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.103	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0698	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0979	5.25	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0829	5.25	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0908	5.25	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.103	5.25	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0263	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0207	1.05	PQL	ng/Kg	
	OCDF	JBQ	0.728	10.5	PQL	ng/Kg	
SL-005-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.599	5.76	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JBQ	0.265	5.76	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0365	5.76	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0673	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.187	5.76	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0681	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.355	5.76	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.342	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0880	5.76	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.263	5.76	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0841	5.76	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.107	5.76	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0254	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0287	1.15	PQL	ng/Kg	
	OCDD	JB	4.14	11.5	PQL	ng/Kg	
	OCDF	JB	0.400	11.5	PQL	ng/Kg	
SL-005-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.12	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.188	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0778	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.122	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.369	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.118	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.299	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.216	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0651	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.104	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.149	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.119	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0433	1.10	PQL	ng/Kg	
	OCDF	JB	2.74	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JBQ	0.316	5.75	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.281	5.75	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0802	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0557	5.75	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.129	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.207	5.75	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.115	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.434	5.75	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.373	5.75	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.246	5.75	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.498	5.75	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.114	5.75	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.286	5.75	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.145	1.15	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.172	1.15	PQL	ng/Kg	
	OCDD	JB	2.45	11.5	PQL	ng/Kg	
	OCDF	JB	0.229	11.5	PQL	ng/Kg	
SL-008-SA5C-SB-8.0-9.0	1,2,3,4,6,7,8-HPCDD	JB	5.21	5.48	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.670	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.192	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0671	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.108	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.113	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0954	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.125	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0771	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0324	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0471	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.126	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0588	5.48	PQL	ng/Kg	
	OCDF	JB	0.906	11.0	PQL	ng/Kg	
SL-009-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	3.08	5.35	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.873	5.35	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.110	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0473	5.35	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0872	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.196	5.35	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.102	5.35	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.156	5.35	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.120	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0531	5.35	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0731	5.35	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.128	5.35	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.167	5.35	PQL	ng/Kg	
	OCDF	JB	1.60	10.7	PQL	ng/Kg	
SL-009-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	4.02	5.59	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.606	5.59	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0940	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0475	5.59	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0687	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.209	5.59	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0694	5.59	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.150	5.59	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.118	5.59	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0591	5.59	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.112	5.59	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0701	5.59	PQL	ng/Kg	
	OCDF	JB	1.11	11.2	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.46	5.71	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.170	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0979	5.71	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.132	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.389	5.71	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.148	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.337	5.71	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.228	5.71	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0994	5.71	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.111	5.71	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.150	5.71	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.115	5.71	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0332	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0272	1.14	PQL	ng/Kg	
	OCDF	JB	3.07	11.4	PQL	ng/Kg	
SL-010-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	1.73	5.48	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.332	5.48	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0747	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0396	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0865	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0683	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0503	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0838	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.100	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0654	5.48	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0521	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0951	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0749	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0361	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0285	1.10	PQL	ng/Kg	
	OCDF	JB	0.528	11.0	PQL	ng/Kg	
SL-011-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	0.945	5.50	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.149	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0742	5.50	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.103	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.290	5.50	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0931	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.234	5.50	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.165	5.50	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.0882	5.50	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0947	5.50	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.127	5.50	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.149	5.50	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.0209	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0371	1.10	PQL	ng/Kg	
	OCDF	JB	1.75	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.17	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.142	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.102	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0995	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.345	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.110	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.230	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.122	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0832	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.161	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.158	5.41	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0282	1.08	PQL	ng/Kg	
	OCDF	JB	2.59	10.8	PQL	ng/Kg	
SL-057-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	0.890	5.79	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.105	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0583	5.79	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0702	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.230	5.79	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0620	5.79	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.207	5.79	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0902	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0627	5.79	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.102	5.79	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0885	5.79	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.118	5.79	PQL	ng/Kg	
	OCDF	JB	2.48	11.6	PQL	ng/Kg	
SL-234-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.842	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.574	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.287	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.72	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.339	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.09	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.156	5.47	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.241	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.191	5.47	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.550	5.47	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.251	5.47	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0595	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0478	1.09	PQL	ng/Kg	
SL-235-SA5B-SS-0.0-0.5	1,2,3,4,7,8-HXCDF	JB	2.92	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	4.08	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.879	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	3.40	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.741	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.41	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.391	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.180	1.08	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX019 **Laboratory: LL**

EDD Filename: DX019_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-287-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.73	5.41	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.479	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.364	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.272	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.948	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.319	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.811	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.108	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.199	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.159	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.364	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.185	5.41	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0338	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.0571	1.08	PQL	ng/Kg	
	OCDF	JB	8.60	10.8	PQL	ng/Kg	
SL-288-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.27	5.22	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.612	5.22	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0805	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0327	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0769	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.139	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0609	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.107	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.0487	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0375	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0329	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0989	5.22	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0681	5.22	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0189	1.04	PQL	ng/Kg	
	OCDF	JB	1.06	10.4	PQL	ng/Kg	
SL-290-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.91	5.36	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.300	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.247	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.278	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.776	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.223	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.393	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.156	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.180	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0991	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.248	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.273	5.36	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0419	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.0309	1.07	PQL	ng/Kg	

LDC #: 25340Q21

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: CA
2nd Reviewer: L

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

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	Compound	Finding	Associated Samples	Qualifications
		OCDD	> calibration range	SL-235-SASB-SS-0.0-0.5	J det / P

Comments: See sample calculation verification worksheet for recalculations

SAMPLE DELIVERY GROUP

DX020

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-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163642	N	METHOD	1613B	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163641	N	METHOD	1613B	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163647	N	METHOD	1613B	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163635	N	METHOD	1613B	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163643	N	METHOD	1613B	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163644	N	METHOD	1613B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163636	N	METHOD	1613B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163637	MS	METHOD	1613B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163638	MSD	METHOD	1613B	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163645	FD	METHOD	1613B	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163649	N	METHOD	1613B	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163634	N	METHOD	1613B	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163640	N	METHOD	1613B	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163639	N	METHOD	1613B	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163633	N	METHOD	1613B	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163648	N	METHOD	1613B	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163646	N	METHOD	1613B	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163654	N	METHOD	1613B	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163651	N	METHOD	1613B	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163650	N	METHOD	1613B	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163653	N	METHOD	1613B	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163652	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: DX020 Laboratory: LL

EDD Filename: DX020_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 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
1,2,3,7,8,9-HXCDF	1.42	JB	0.0953	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.25	JB	0.0429	MDL	5.31	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.95	JB	0.0439	MDL	5.31	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.592	J	0.0427	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.564	J	0.0905	MDL	1.06	PQL	ng/Kg	J	Z
OCDD	8980	EB	0.261	MDL	10.6	PQL	ng/Kg	J	*XI

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.99	JB	0.0877	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.99	JB	0.0579	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.00	JB	0.0524	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	2.44	JB	0.0489	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.22	JB	0.0589	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.718	JB	0.0576	MDL	5.54	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.15	JBQ	0.101	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	3.27	JB	0.0507	MDL	5.54	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	4.53	JB	0.0504	MDL	5.54	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.187	J	0.0386	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	1.03	J	0.131	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8-HxCDD	0.368	JBQ	0.274	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.523	JBQ	0.234	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.12	J	0.286	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.326	JBQ	0.184	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.836	JBQ	0.284	MDL	5.97	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.71	JB	0.170	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.674	JB	0.223	MDL	5.97	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.844	JB	0.172	MDL	5.97	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	1.07	JB	0.0770	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.578	JB	0.0416	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.593	JB	0.0306	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.05	J	0.0390	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.541	JB	0.0277	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.18	JB	0.0388	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.204	JBQ	0.0354	MDL	5.56	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.385	JB	0.0470	MDL	5.56	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.21	JB	0.0304	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.768	JB	0.0317	MDL	5.56	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.812	JB	0.0292	MDL	5.56	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0302	JQ	0.0237	MDL	1.11	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.331	JQ	0.0571	MDL	1.11	PQL	ng/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *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-HPCDF	4.46	JBQ	0.210	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.283	JBQ	0.176	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.223	JBQ	0.154	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.09	JQ	0.168	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.493	JBQ	0.182	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.316	JBQ	0.149	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.323	JBQ	0.0916	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.244	JBQ	0.147	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.336	JBQ	0.0880	MDL	5.45	PQL	ng/Kg	J	Z

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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-HPCDF	169	B	0.0580	MDL	5.34	PQL	ng/Kg	J	Q
1,2,3,7,8,9-HXCDF	1.09	JB	0.0850	MDL	5.34	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.12	JB	0.0374	MDL	5.34	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.66	JB	0.0359	MDL	5.34	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.581	J	0.0464	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.449	J	0.0918	MDL	1.07	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
OCDD	7170	EB	0.212	MDL	10.7	PQL	ng/Kg	J	*XI
OCDF	362	B	0.0697	MDL	10.7	PQL	ng/Kg	J	Q, Q

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *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	2.95	JB	0.0561	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.03	JB	0.0301	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.36	JB	0.0401	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.63	JB	0.0359	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.17	JB	0.0328	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.786	JB	0.0461	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.860	JB	0.0479	MDL	5.28	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.51	JB	0.0322	MDL	5.28	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.95	JB	0.0393	MDL	5.28	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.63	JBQ	0.0308	MDL	5.28	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.731	J	0.0758	MDL	1.06	PQL	ng/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	0.908	JB	0.0637	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.707	JB	0.0391	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.56	JBQ	0.0394	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.21	J	0.0393	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.00	JB	0.0364	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.00	JB	0.0419	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.708	JBQ	0.0442	MDL	5.25	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.36	JB	0.0320	MDL	5.25	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.833	JB	0.0380	MDL	5.25	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.878	JB	0.0278	MDL	5.25	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0983	JQ	0.0229	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.676	JQ	0.0606	MDL	1.05	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-074-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	1.25	JBQ	0.0777	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.904	JB	0.0477	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.791	JBQ	0.0453	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.72	J	0.0479	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.806	JB	0.0411	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.32	JB	0.0484	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.465	JBQ	0.0502	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.898	JB	0.0352	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.994	JB	0.0438	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.692	JB	0.0316	MDL	5.45	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.132	JQ	0.0253	MDL	1.09	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.333	JQ	0.0728	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:28:00 ***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-HPCDF	3.62	JB	0.0240	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.468	JB	0.0356	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.447	JBQ	0.0292	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.350	JB	0.0286	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.984	J	0.0313	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.360	JB	0.0256	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.899	JB	0.0309	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.190	JB	0.0335	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.293	JB	0.0348	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.211	JB	0.0192	MDL	5.31	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.373	JB	0.0275	MDL	5.31	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.270	JBQ	0.0179	MDL	5.31	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.152	JQ	0.0387	MDL	1.06	PQL	ng/Kg	J	Z
OCDF	7.92	JB	0.0502	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	2.45	JB	0.146	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.52	JB	0.126	MDL	5.51	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-078-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
1,2,3,4,7,8-HXCDF	1.49	JB	0.0946	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.57	JB	0.0947	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.70	JB	0.136	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.05	JB	0.109	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.82	JB	0.0585	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.89	JB	0.0987	MDL	5.51	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.69	JB	0.0505	MDL	5.51	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.134	JQ	0.0423	MDL	1.10	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.812	JQ	0.121	MDL	1.10	PQL	ng/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,3,7,8-TCDF	31.2		0.292	MDL	1.08	PQL	ng/Kg		Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **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	3.49	JB	0.763	MDL	5.42	PQL	ng/Kg	J	Z
OCDD	4950	EB	1.10	MDL	10.8	PQL	ng/Kg	J	*XI

Sample ID: SL-084-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	2.04	JB	0.0493	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.97	JB	0.0405	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.01	JB	0.0333	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	3.90	J	0.0411	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.28	JB	0.0306	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.33	JB	0.0418	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.379	JB	0.0399	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.883	JBQ	0.0534	MDL	5.47	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.257	JB	0.0260	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.75	JB	0.0322	MDL	5.47	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.239	JB	0.0246	MDL	5.47	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.104	J	0.0324	MDL	1.09	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
2,3,7,8-TCDF	0.114	J	0.0345	MDL	1.09	PQL	ng/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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-HPCDF	1.22	JB	0.141	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.219	JQ	0.110	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0913	JBQ	0.0763	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.260	JBQ	0.118	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.110	JBQ	0.0971	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0998	JBQ	0.0562	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.152	JBQ	0.0834	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0780	JB	0.0525	MDL	5.31	PQL	ng/Kg	U	B
OCDF	3.30	JB	0.177	MDL	10.6	PQL	ng/Kg	J	Z

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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-HxCDD	0.383	JB	0.344	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	2.30	JBQ	0.298	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.755	JB	0.269	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.04	JBQ	0.350	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.132	JBQ	0.0939	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.848	JBQ	0.291	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.285	JBQ	0.0864	MDL	5.36	PQL	ng/Kg	J	Z
OCDD	10500	EB	1.47	MDL	10.7	PQL	ng/Kg	J	*XI

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *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	3.82	JB	0.192	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.724	JBQ	0.0910	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0722	JBQ	0.0686	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.170	JBQ	0.100	MDL	5.63	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0894	JBQ	0.0796	MDL	5.63	PQL	ng/Kg	U	B
OCDF	1.54	JB	0.173	MDL	11.3	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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-HPCDD	1.86	JBQ	0.168	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.363	JBQ	0.0630	MDL	5.63	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.145	JQ	0.0891	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.221	JBQ	0.0909	MDL	5.63	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.142	JBQ	0.0786	MDL	5.63	PQL	ng/Kg	U	B
OCDF	0.798	JB	0.163	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *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	0.794	JB	0.0940	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.492	JBQ	0.0391	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.16	JB	0.0543	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.32	JQ	0.0391	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.06	JB	0.0457	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.936	JB	0.0397	MDL	5.69	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.862	JB	0.0665	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.695	JB	0.0541	MDL	5.69	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.892	JB	0.0375	MDL	5.69	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.800	JQ	0.107	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	4.74	JBQ	0.500	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.767	JBQ	0.606	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.524	JBQ	0.415	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.14	JBQ	0.371	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.21	JQ	0.446	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.810	JB	0.358	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.917	JBQ	0.442	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.595	JBQ	0.383	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.457	JBQ	0.262	MDL	5.31	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.695	JBQ	0.338	MDL	5.31	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.82	JBQ	0.238	MDL	5.31	PQL	ng/Kg	J	Z
OCDF	9.75	JB	0.561	MDL	10.6	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory:** LL

EDD Filename: DX020_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-301-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	3.98	JB	0.0775	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.77	JB	0.0402	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	3.63	JB	0.0633	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.15	JB	0.0560	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.07	JBQ	0.0643	MDL	5.48	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	3.84	JB	0.0432	MDL	5.48	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	2.78	JB	0.0596	MDL	5.48	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	3.89	JB	0.0390	MDL	5.48	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.205	J	0.0345	MDL	1.10	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_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
*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	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX020

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DX020 **Laboratory: LL**
EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B **Preparation Method: METHOD**
Matrix: SO

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
SL-301-SA5B-SS-0.0-0.5 (REA)	Extractionn To Analysis	57.00	45.00	DAYS	J (all detects) UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371647	1/4/2011 4:47:00 PM	1,2,3,4,6,7,8-HPCDD	0.120 ng/Kg	DUP04-SA5B-QC-121310
		1,2,3,4,6,7,8-HPCDF	0.142 ng/Kg	SED-029-SIV-SD-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0456 ng/Kg	SED-030-SIV-SD-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0175 ng/Kg	SED-031-SIV-SD-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.0536 ng/Kg	SED-040-SIV-SD-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.0265 ng/Kg	SL-071-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.0253 ng/Kg	SL-072-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.0565 ng/Kg	SL-073-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.0342 ng/Kg	SL-074-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.0395 ng/Kg	SL-076-SA5B-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0592 ng/Kg	SL-078-SA5B-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0407 ng/Kg	SL-083-SA5B-SS-0.0-0.5
		OCDD	0.267 ng/Kg	SL-084-SA5B-SS-0.0-0.5
		OCDF	0.165 ng/Kg	SL-086-SA5B-SS-0.0-0.5
				SL-089-SA5B-SS-0.0-0.5
				SL-092-SA5B-SS-0.0-0.5
				SL-103-SA5B-SS-0.0-0.5
				SL-139-SA5B-SS-0.0-0.5
				SL-236-SA5B-SS-0.0-0.5
				SL-301-SA5B-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
SED-031-SIV-SD-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.204 ng/Kg	0.204U ng/Kg
SED-040-SIV-SD-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.223 ng/Kg	0.223U ng/Kg
SED-040-SIV-SD-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.244 ng/Kg	0.244U ng/Kg
SL-076-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.190 ng/Kg	0.190U ng/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0913 ng/Kg	0.0913U ng/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.110 ng/Kg	0.110U ng/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0998 ng/Kg	0.0998U ng/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.152 ng/Kg	0.152U ng/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0780 ng/Kg	0.0780U ng/Kg
SL-089-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.132 ng/Kg	0.132U ng/Kg
SL-092-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0722 ng/Kg	0.0722U ng/Kg
SL-092-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0894 ng/Kg	0.0894U ng/Kg
SL-103-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.363 ng/Kg	0.363U ng/Kg
SL-103-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.142 ng/Kg	0.142U ng/Kg
SL-103-SA5B-SS-0.0-0.5(RES)	OCDF	0.798 ng/Kg	0.798U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_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-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	1,2,3,4,6,7,8-HPCDF OCDF	- -	- 144	40.00-135.00 40.00-135.00	26 (20.00) 26 (20.00)	1,2,3,4,6,7,8-HPCDF OCDF	J (all detects)
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	1,2,3,4,6,7,8-HPCDD OCDD	-76 -683	216 497	40.00-135.00 40.00-135.00	33 (20.00) 36 (20.00)	1,2,3,4,6,7,8-HPCDD OCDD	No Qual, >4x

Field Duplicate RPD Report

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
MOISTURE	6.3	5.9	7		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
1,2,3,4,6,7,8-HPCDD	869	1140	27	50.00	
1,2,3,4,6,7,8-HPCDF	169	223	28	50.00	
1,2,3,4,7,8,9-HPCDF	13.6	17.8	27	50.00	
1,2,3,4,7,8-HxCDD	14.0	18.3	27	50.00	
1,2,3,4,7,8-HXCDF	7.50	9.88	27	50.00	
1,2,3,6,7,8-HXCDD	27.7	35.2	24	50.00	
1,2,3,6,7,8-HXCDF	8.83	11.0	22	50.00	
1,2,3,7,8,9-HXCDD	30.6	38.7	23	50.00	
1,2,3,7,8,9-HXCDF	1.09	1.42	26	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	5.45	6.69	20	50.00	
1,2,3,7,8-PECDF	1.12	1.25	11	50.00	
2,3,4,6,7,8-HXCDF	12.8	16.1	23	50.00	
2,3,4,7,8-PECDF	1.66	1.95	16	50.00	
2,3,7,8-TCDD	0.581	0.592	2	50.00	
2,3,7,8-TCDF	0.449	0.564	23	50.00	
OCDD	7170	8980	22	50.00	
OCDF	362	471	26	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX020 Laboratory: LL

EDD Filename: DX020_v1 eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-083-SA5B-SS-0.0-0.5	2,3,7,8-TCDF		31.2	1.08	PQL	ng/Kg	
DUP04-SA5B-QC-121310	1,2,3,7,8,9-HXCDF	JB	1.42	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.25	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.95	5.31	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDD	J	0.592	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.564	1.06	PQL	ng/Kg	
SED-029-SIV-SD-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.99	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.99	5.54	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.00	5.54	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	2.44	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.22	5.54	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.718	5.54	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	1.15	5.54	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	3.27	5.54	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	4.53	5.54	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.187	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	J	1.03	1.11	PQL	ng/Kg	
SED-030-SIV-SD-0.0-0.5	1,2,3,4,7,8-HxCDD	JBQ	0.368	5.97	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.523	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	1.12	5.97	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.326	5.97	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.836	5.97	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.71	5.97	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.674	5.97	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.844	5.97	PQL	ng/Kg	
SED-031-SIV-SD-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.07	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.578	5.56	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.593	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	3.05	5.56	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.541	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.18	5.56	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.204	5.56	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.385	5.56	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.21	5.56	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.768	5.56	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.812	5.56	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0302	1.11	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.331	1.11	PQL	ng/Kg	
SED-040-SIV-SD-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JBQ	4.46	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.283	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.223	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	1.09	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.493	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.316	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.323	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.244	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.336	5.45	PQL	ng/Kg	
SL-071-SA5B-SS-0.0-0.5	1,2,3,7,8,9-HXCDF	JB	1.09	5.34	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.12	5.34	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.66	5.34	PQL	ng/Kg	J (all detects)
	2,3,7,8-TCDD	J	0.581	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.449	1.07	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-072-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.95	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.03	5.28	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	2.36	5.28	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.63	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.17	5.28	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.786	5.28	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.860	5.28	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.51	5.28	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.95	5.28	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.63	5.28	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.731	1.06	PQL	ng/Kg	
SL-073-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.908	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.707	5.25	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	1.56	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	2.21	5.25	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.00	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.00	5.25	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.708	5.25	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.36	5.25	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.833	5.25	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.878	5.25	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.0983	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.676	1.05	PQL	ng/Kg	
SL-074-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	1.25	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.904	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.791	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	2.72	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.806	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.32	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.465	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	0.898	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.994	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.692	5.45	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.132	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.333	1.09	PQL	ng/Kg	
SL-076-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.62	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.468	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.447	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.350	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	0.984	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.360	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.899	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.190	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.293	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.211	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.373	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.270	5.31	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.152	1.06	PQL	ng/Kg	
	OCDF	JB	7.92	10.6	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-078-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.45	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.52	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.49	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.57	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.70	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	1.05	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	1.82	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.89	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.69	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JQ	0.134	1.10	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.812	1.10	PQL	ng/Kg	
SL-083-SA5B-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	JB	3.49	5.42	PQL	ng/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.04	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.97	5.47	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.01	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	J	3.90	5.47	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.28	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.33	5.47	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.379	5.47	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.883	5.47	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.257	5.47	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.75	5.47	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.239	5.47	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.104	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	J	0.114	1.09	PQL	ng/Kg	
SL-086-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	1.22	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.219	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0913	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.260	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.110	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.0998	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.152	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.0780	5.31	PQL	ng/Kg	
	OCDF	JB	3.30	10.6	PQL	ng/Kg	
SL-089-SA5B-SS-0.0-0.5	1,2,3,4,7,8-HxCDD	JB	0.383	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	2.30	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.755	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	1.04	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JBQ	0.132	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.848	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.285	5.36	PQL	ng/Kg	
SL-092-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.82	5.63	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.724	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0722	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.170	5.63	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0894	5.63	PQL	ng/Kg	
	OCDF	JB	1.54	11.3	PQL	ng/Kg	
SL-103-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JBQ	1.86	5.63	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JBQ	0.363	5.63	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	0.145	5.63	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JBQ	0.221	5.63	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.142	5.63	PQL	ng/Kg	
	OCDF	JB	0.798	11.3	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX020 **Laboratory: LL**

EDD Filename: DX020_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-139-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.794	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.492	5.69	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.16	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	1.32	5.69	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.06	5.69	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDD	JB	0.936	5.69	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.862	5.69	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.695	5.69	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.892	5.69	PQL	ng/Kg	
	2,3,7,8-TCDF	JQ	0.800	1.14	PQL	ng/Kg	
SL-236-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JBQ	4.74	5.31	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.767	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.524	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	1.14	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JQ	1.21	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.810	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.917	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JBQ	0.595	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.457	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.695	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	1.82	5.31	PQL	ng/Kg	
	OCDF	JB	9.75	10.6	PQL	ng/Kg	
SL-301-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	3.98	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	2.77	5.48	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	3.63	5.48	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	3.15	5.48	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	1.07	5.48	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDF	JB	3.84	5.48	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.78	5.48	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	3.89	5.48	PQL	ng/Kg	
	2,3,7,8-TCDD	J	0.205	1.10	PQL	ng/Kg	

LDC #: 25550121

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: A
2nd Reviewer:

METHOD: GC/MS Dioxins/Dibenzofurans (Method 1613)

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	Compound	Finding	Associated Samples	Qualifications
		OCDD	> calibration range	DUP04-SA5B-QC-121310	J det / P
		↓	↓	SL-071-SA5B-SS-0.0-0.5	↓
				-083- ↓ ↓ ↓	
				-089-	

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25550 12 \

VALIDATION FINDINGS WORKSHEET
Overall Assessment of Data

Reviewer: A 1
2nd Reviewer: [signature]

METHOD: GC/MS Dioxins/Dibenzofurans (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	Qualifications
		SL-083-SASB-55-0.0-0.5	Results from column	-	R/A
			DB-5MS		
		SL-301-SASB-55-0.0-0.5	Results from column	-	R/A
			SP2331		

Comments: _____

SAMPLE DELIVERY GROUP

DX021

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-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163903	N	METHOD	1613B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163897	N	METHOD	1613B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163898	MS	METHOD	1613B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163899	MSD	METHOD	1613B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163895	N	METHOD	1613B	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163904	N	METHOD	1613B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163896	FD	METHOD	1613B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163901	N	METHOD	1613B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163902	N	METHOD	1613B	III
13-Dec-2010	EB15-SA5B-121310	6163900	EB	METHOD	1613B	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163906	N	METHOD	1613B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163905	N	METHOD	1613B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163909	N	METHOD	1613B	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163907	N	METHOD	1613B	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163912	N	METHOD	1613B	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163908	N	METHOD	1613B	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163913	N	METHOD	1613B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163910	N	METHOD	1613B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163911	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: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** AQ

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 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	1.77	JBQ	0.456	MDL	11.5	PQL	pg/L	U	B
1,2,3,4,6,7,8-HPCDF	3.04	JB	0.258	MDL	11.5	PQL	pg/L	U	B
1,2,3,4,7,8,9-HPCDF	0.663	JB	0.290	MDL	11.5	PQL	pg/L	U	B
1,2,3,4,7,8-HxCDD	0.514	JB	0.440	MDL	11.5	PQL	pg/L	UJ	B, I
1,2,3,4,7,8-HXCDF	1.09	JBQ	0.295	MDL	11.5	PQL	pg/L	U	B
1,2,3,6,7,8-HXCDD	1.01	JB	0.449	MDL	11.5	PQL	pg/L	UJ	B, I
1,2,3,6,7,8-HXCDF	0.846	JBQ	0.280	MDL	11.5	PQL	pg/L	U	B
1,2,3,7,8,9-HXCDD	0.622	JB	0.496	MDL	11.5	PQL	pg/L	UJ	B, I
1,2,3,7,8,9-HXCDF	0.654	JB	0.304	MDL	11.5	PQL	pg/L	U	B
1,2,3,7,8-PECDD	2.02	JB	1.28	MDL	11.5	PQL	pg/L	UJ	B, I
1,2,3,7,8-PECDF	0.591	JB	0.334	MDL	11.5	PQL	pg/L	U	B
2,3,4,6,7,8-HXCDF	1.13	JB	0.272	MDL	11.5	PQL	pg/L	U	B
2,3,4,7,8-PECDF	0.623	JB	0.289	MDL	11.5	PQL	pg/L	U	B
2,3,7,8-TCDD	3.48	U	3.48	MDL	3.48	PQL	pg/L	UJ	I
OCDD	7.38	JB	0.505	MDL	23.0	PQL	pg/L	U	B
OCDF	1.71	JB	0.506	MDL	23.0	PQL	pg/L	U	B

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 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	1.03	JB	0.0240	MDL	5.73	PQL	ng/Kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.677	JB	0.0109	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.139	JBQ	0.0231	MDL	5.73	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0401	JBQ	0.0172	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.160	JB	0.0174	MDL	5.73	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.287	JB	0.0173	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.115	JBQ	0.0138	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.447	JB	0.0174	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.512	JB	0.0242	MDL	5.73	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.0649	JBQ	0.0263	MDL	5.73	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.334	JBQ	0.00952	MDL	5.73	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.237	JBQ	0.0162	MDL	5.73	PQL	ng/Kg	J	Z, FD

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 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
2,3,4,7,8-PECDF	0.143	JBQ	0.0106	MDL	5.73	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0165	U	0.0165	MDL	1.15	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0368	JB	0.0216	MDL	1.15	PQL	ng/Kg	U	B
OCDD	8.45	JB	0.0242	MDL	11.5	PQL	ng/Kg	J	Z, FD
OCDF	0.898	JBQ	0.0275	MDL	11.5	PQL	ng/Kg	U	B

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 2:57:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	1.13	JB	0.0370	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.86	JB	0.0334	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.19	JB	0.0302	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	4.48	JB	0.0348	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	1.12	JB	0.0270	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	3.68	JB	0.0344	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.369	JB	0.0360	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	1.40	JB	0.0530	MDL	5.72	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	1.11	JB	0.0222	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.46	JB	0.0289	MDL	5.72	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.23	JB	0.0214	MDL	5.72	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.228	JB	0.0289	MDL	1.14	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.556	JBQ	0.0564	MDL	1.14	PQL	ng/Kg	J	Z

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	0.643	JB	0.0398	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	1.21	JB	0.0339	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.741	JB	0.0300	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.48	JB	0.0356	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.799	JB	0.0274	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.01	JB	0.0350	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.217	JB	0.0343	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.874	JBQ	0.0525	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.460	JB	0.0242	MDL	5.31	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	1.07	JB	0.0290	MDL	5.31	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
2,3,4,7,8-PECDF	0.628	JBQ	0.0228	MDL	5.31	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.103	JBQ	0.0315	MDL	1.06	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.227	JB	0.0502	MDL	1.06	PQL	ng/Kg	J	Z

Sample ID: SL-001-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 4:08:00 *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	0.461	JB	0.0250	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.790	JB	0.0133	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.0998	JB	0.0221	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0327	JB	0.0182	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.155	JBQ	0.0175	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.117	JBQ	0.0191	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.150	JB	0.0158	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.139	JB	0.0191	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.110	JB	0.0228	MDL	5.36	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0412	JBQ	0.0101	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.225	JB	0.0170	MDL	5.36	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.136	JB	0.0103	MDL	5.36	PQL	ng/Kg	U	B
OCDD	1.36	JB	0.0345	MDL	10.7	PQL	ng/Kg	U	B
OCDF	0.515	JB	0.0259	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-001-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 4:16:00 *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	0.665	JB	0.0272	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.892	JB	0.0112	MDL	6.02	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.148	JB	0.0200	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0352	JBQ	0.0178	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.169	JB	0.0170	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.0810	JBQ	0.0184	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.133	JB	0.0139	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0829	JBQ	0.0173	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.140	JB	0.0196	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0381	JBQ	0.0261	MDL	6.02	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0615	JB	0.0111	MDL	6.02	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-001-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 4:16:00 ***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	0.282	JB	0.0159	MDL	6.02	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.144	JB	0.0117	MDL	6.02	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0215	JB	0.0175	MDL	1.20	PQL	ng/Kg	U	B
OCDD	4.85	JB	0.0306	MDL	12.0	PQL	ng/Kg	J	Z
OCDF	0.700	JB	0.0295	MDL	12.0	PQL	ng/Kg	U	B

Sample ID: SL-003-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 2:37:00 ***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	1.96	JB	0.0161	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.212	JB	0.0240	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0843	JB	0.0298	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.231	JB	0.0204	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.358	JB	0.0297	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.187	JB	0.0179	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.270	JB	0.0281	MDL	5.39	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.161	JB	0.0219	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0932	JB	0.0265	MDL	5.39	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0899	JBQ	0.0120	MDL	5.39	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.303	JB	0.0184	MDL	5.39	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.296	JB	0.0145	MDL	5.39	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0234	JB	0.0189	MDL	1.08	PQL	ng/Kg	U	B
OCDF	3.36	JB	0.0278	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 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	2.54	JB	0.0331	MDL	5.64	PQL	ng/Kg	J	Z, FD
1,2,3,4,6,7,8-HPCDF	0.428	JB	0.0140	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0739	JBQ	0.0249	MDL	5.64	PQL	ng/Kg	UJ	B, FD
1,2,3,4,7,8-HxCDD	0.0294	JBQ	0.0219	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0520	JB	0.0181	MDL	5.64	PQL	ng/Kg	UJ	B, FD
1,2,3,6,7,8-HXCDD	0.362	JB	0.0227	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.0857	JB	0.0166	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.510	JBQ	0.0223	MDL	5.64	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.445	JB	0.0220	MDL	5.64	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1613B **Matrix: SO**

Sample ID: SL-006-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 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
1,2,3,7,8-PECDD	0.0742	JB	0.0274	MDL	5.64	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.294	JB	0.0125	MDL	5.64	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.0838	JBQ	0.0170	MDL	5.64	PQL	ng/Kg	UJ	B, FD
2,3,4,7,8-PECDF	0.100	JBQ	0.0120	MDL	5.64	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0249	JBQ	0.0191	MDL	1.13	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.0498	JBQ	0.0242	MDL	1.13	PQL	ng/Kg	U	B
OCDD	25.4	B	0.0332	MDL	11.3	PQL	ng/Kg	J	Q, FD
OCDF	0.999	JB	0.0328	MDL	11.3	PQL	ng/Kg	U	B

Sample ID: SL-006-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 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-HPCDD	5.23	JB	0.0326	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	0.955	JB	0.0101	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.145	JB	0.0186	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0471	JBQ	0.0176	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.163	JB	0.0132	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.204	JB	0.0182	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.143	JB	0.0107	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.197	JB	0.0174	MDL	5.45	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.0937	JB	0.0159	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0346	JBQ	0.0166	MDL	5.45	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0757	JB	0.00773	MDL	5.45	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.241	JB	0.0124	MDL	5.45	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.137	JBQ	0.00784	MDL	5.45	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0321	JBQ	0.0144	MDL	1.09	PQL	ng/Kg	U	B
OCDF	1.53	JB	0.0236	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***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-HPCDF	1.17	JB	0.0161	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.246	JB	0.0285	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.112	JB	0.0271	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.177	JB	0.0220	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.321	JBQ	0.0283	MDL	5.44	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***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-HXCDF	0.135	JBQ	0.0183	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.285	JB	0.0271	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.231	JB	0.0260	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0864	JBQ	0.0310	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.164	JBQ	0.0150	MDL	5.44	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.247	JBQ	0.0212	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.241	JBQ	0.0159	MDL	5.44	PQL	ng/Kg	U	B
OCDF	2.06	JB	0.0337	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***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-HPCDF	1.71	JB	0.0163	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.194	JB	0.0227	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.126	JB	0.0326	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.116	JB	0.0216	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.557	JB	0.0347	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.128	JB	0.0195	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.353	JB	0.0331	MDL	5.51	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.170	JBQ	0.0240	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.119	JBQ	0.0322	MDL	5.51	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0980	JB	0.0144	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.162	JB	0.0206	MDL	5.51	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.144	JB	0.0139	MDL	5.51	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0237	JBQ	0.0225	MDL	1.10	PQL	ng/Kg	U	B
OCDF	4.77	JB	0.0316	MDL	11.0	PQL	ng/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:03:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.847	JB	0.0361	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.909	JB	0.0286	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.629	JB	0.0263	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	2.30	JB	0.0291	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.613	JB	0.0232	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	2.31	JB	0.0298	MDL	5.32	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDF	0.467	JB	0.0317	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.518	JB	0.0419	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.378	JB	0.0142	MDL	5.32	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.706	JB	0.0258	MDL	5.32	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.435	JB	0.0145	MDL	5.32	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0679	JBQ	0.0182	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.214	JB	0.0339	MDL	1.06	PQL	ng/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:04:00 **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	3.96	JB	0.0167	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.478	JB	0.0318	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.443	JB	0.0297	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.378	JB	0.0250	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.946	JB	0.0310	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.373	JB	0.0202	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.884	JB	0.0301	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.236	JB	0.0322	MDL	5.38	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.290	JB	0.0311	MDL	5.38	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.247	JB	0.0121	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.501	JB	0.0237	MDL	5.38	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.329	JB	0.0135	MDL	5.38	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0969	JB	0.0178	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.220	JB	0.0263	MDL	1.08	PQL	ng/Kg	J	Z
OCDF	7.92	JB	0.0316	MDL	10.8	PQL	ng/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
1,2,3,4,7,8,9-HPCDF	0.641	JB	0.0417	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.301	JBQ	0.0415	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.720	JB	0.0294	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.32	JB	0.0437	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.939	JB	0.0270	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.836	JB	0.0432	MDL	5.36	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
1,2,3,7,8,9-HXCDF	0.353	JB	0.0331	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.208	JB	0.0683	MDL	5.36	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.774	JB	0.0205	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.544	JB	0.0278	MDL	5.36	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.517	JB	0.0200	MDL	5.36	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0844	JBQ	0.0232	MDL	1.07	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.197	JB	0.0430	MDL	1.07	PQL	ng/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:17:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,6,7,8-HPCDF	4.08	JB	0.0553	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.527	JBQ	0.0763	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.163	JBQ	0.0416	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.462	JB	0.0252	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.983	JB	0.0426	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.319	JB	0.0236	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	0.485	JB	0.0414	MDL	5.46	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.223	JB	0.0289	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0840	JB	0.0467	MDL	5.46	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.489	JB	0.0191	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.426	JB	0.0249	MDL	5.46	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.386	JB	0.0183	MDL	5.46	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0365	JB	0.0227	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.196	JB	0.0366	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	10.4	JB	0.0502	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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-HPCDF	3.16	JB	0.0349	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8,9-HPCDF	0.430	JBQ	0.0474	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.169	JB	0.0264	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.354	JB	0.0205	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	0.766	JB	0.0269	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.317	JB	0.0311	MDL	5.44	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory:** LL

EDD Filename: DX021_v1. **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-091-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
1,2,3,7,8,9-HXCDD	0.414	JB	0.0237	MDL	5.44	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.212	JB	0.0210	MDL	5.44	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.344	JBQ	0.0137	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.438	JBQ	0.0185	MDL	5.44	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.333	JB	0.0115	MDL	5.44	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.0431	JBQ	0.0108	MDL	1.09	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.198	JB	0.0229	MDL	1.09	PQL	ng/Kg	J	Z
OCDF	5.66	JB	0.0266	MDL	10.9	PQL	ng/Kg	J	Z

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *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	0.995	JBQ	0.0846	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	0.492	JBQ	0.0721	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.509	JB	0.0508	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDD	1.84	JB	0.0747	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.603	JB	0.0458	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	1.04	JB	0.0712	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.532	JB	0.0553	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDD	0.369	JBQ	0.0901	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.515	JB	0.0322	MDL	5.26	PQL	ng/Kg	J	Z
2,3,4,6,7,8-HXCDF	0.632	JB	0.0492	MDL	5.26	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	0.503	JB	0.0312	MDL	5.26	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.282	JB	0.0499	MDL	1.05	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.146	JBQ	0.0601	MDL	1.05	PQL	ng/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_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
*#	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control Outlier Reports

DX021

Method Blank Outlier Report

Lab Reporting Batch ID: DX021 Laboratory: LL

EDD Filename: DX021_v1. eQAPP Name: CDM_SSFL_110509

Method: 1613B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371629	12/30/2010 4:29:00 PM	1,2,3,4,6,7,8-HPCDD	1.35 pg/L	EB15-SA5B-121310
		1,2,3,4,6,7,8-HPCDF	1.41 pg/L	
		1,2,3,4,7,8,9-HPCDF	0.582 pg/L	
		1,2,3,4,7,8-HxCDD	0.485 pg/L	
		1,2,3,4,7,8-HXCDF	0.599 pg/L	
		1,2,3,6,7,8-HXCDD	0.512 pg/L	
		1,2,3,6,7,8-HXCDF	0.568 pg/L	
		1,2,3,7,8,9-HXCDD	0.483 pg/L	
		1,2,3,7,8,9-HXCDF	0.637 pg/L	
		1,2,3,7,8-PECDD	0.684 pg/L	
		1,2,3,7,8-PECDF	0.474 pg/L	
		2,3,4,6,7,8-HXCDF	0.505 pg/L	
		2,3,4,7,8-PECDF	0.810 pg/L	
		2,3,7,8-TCDD	2.81 pg/L	
		2,3,7,8-TCDF	0.181 pg/L	
		OCDD	2.39 pg/L	
		OCDF	1.43 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
EB15-SA5B-121310(RES)	1,2,3,4,6,7,8-HPCDD	1.77 pg/L	1.77U pg/L
EB15-SA5B-121310(RES)	1,2,3,4,6,7,8-HPCDF	3.04 pg/L	3.04U pg/L
EB15-SA5B-121310(RES)	1,2,3,4,7,8,9-HPCDF	0.663 pg/L	0.663U pg/L
EB15-SA5B-121310(RES)	1,2,3,4,7,8-HxCDD	0.514 pg/L	0.514U pg/L
EB15-SA5B-121310(RES)	1,2,3,4,7,8-HXCDF	1.09 pg/L	1.09U pg/L
EB15-SA5B-121310(RES)	1,2,3,6,7,8-HXCDD	1.01 pg/L	1.01U pg/L
EB15-SA5B-121310(RES)	1,2,3,6,7,8-HXCDF	0.846 pg/L	0.846U pg/L
EB15-SA5B-121310(RES)	1,2,3,7,8,9-HXCDD	0.622 pg/L	0.622U pg/L
EB15-SA5B-121310(RES)	1,2,3,7,8,9-HXCDF	0.654 pg/L	0.654U pg/L
EB15-SA5B-121310(RES)	1,2,3,7,8-PECDD	2.02 pg/L	2.02U pg/L
EB15-SA5B-121310(RES)	1,2,3,7,8-PECDF	0.591 pg/L	0.591U pg/L
EB15-SA5B-121310(RES)	2,3,4,6,7,8-HXCDF	1.13 pg/L	1.13U pg/L
EB15-SA5B-121310(RES)	2,3,4,7,8-PECDF	0.623 pg/L	0.623U pg/L
EB15-SA5B-121310(RES)	OCDD	7.38 pg/L	7.38U pg/L
EB15-SA5B-121310(RES)	OCDF	1.71 pg/L	1.71U pg/L

Method Blank Outlier Report

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB371514	1/14/2011 3:14:00 PM	1,2,3,4,6,7,8-HPCDD	0.136 ng/Kg	DUP13-SA5C-QC-121310
		1,2,3,4,6,7,8-HPCDF	0.123 ng/Kg	SED-032-SIV-SD-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.0507 ng/Kg	SED-033-SIV-SD-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.0185 ng/Kg	SL-001-SA5C-SB-4.0-5.0
		1,2,3,4,7,8-HXCDF	0.0503 ng/Kg	SL-001-SA5C-SB-9.0-10.0
		1,2,3,6,7,8-HXCDD	0.0227 ng/Kg	SL-003-SA5C-SB-4.0-5.0
		1,2,3,6,7,8-HXCDF	0.0334 ng/Kg	SL-006-SA5C-SB-4.0-5.0
		1,2,3,7,8,9-HXCDD	0.0268 ng/Kg	SL-006-SA5C-SB-9.0-10.0
		1,2,3,7,8,9-HXCDF	0.0604 ng/Kg	SL-007-SA5C-SB-4.0-5.0
		1,2,3,7,8-PECDD	0.0278 ng/Kg	SL-007-SA5C-SB-9.0-10.0
		1,2,3,7,8-PECDF	0.0340 ng/Kg	SL-075-SA5B-SS-0.0-0.5
		2,3,4,6,7,8-HXCDF	0.0453 ng/Kg	SL-077-SA5B-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.0647 ng/Kg	SL-085-SA5B-SS-0.0-0.5
		2,3,7,8-TCDD	0.0150 ng/Kg	SL-087-SA5B-SS-0.0-0.5
		2,3,7,8-TCDF	0.0289 ng/Kg	SL-091-SA5B-SS-0.0-0.5
		OCDD	0.342 ng/Kg	SL-095-SA5B-SS-0.0-0.5
		OCDF	0.248 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
DUP13-SA5C-QC-121310(RES)	1,2,3,4,7,8,9-HPCDF	0.139 ng/Kg	0.139U ng/Kg
DUP13-SA5C-QC-121310(RES)	1,2,3,4,7,8-HxCDD	0.0401 ng/Kg	0.0401U ng/Kg
DUP13-SA5C-QC-121310(RES)	1,2,3,4,7,8-HXCDF	0.160 ng/Kg	0.160U ng/Kg
DUP13-SA5C-QC-121310(RES)	1,2,3,6,7,8-HXCDF	0.115 ng/Kg	0.115U ng/Kg
DUP13-SA5C-QC-121310(RES)	1,2,3,7,8-PECDD	0.0649 ng/Kg	0.0649U ng/Kg
DUP13-SA5C-QC-121310(RES)	2,3,4,7,8-PECDF	0.143 ng/Kg	0.143U ng/Kg
DUP13-SA5C-QC-121310(RES)	2,3,7,8-TCDF	0.0368 ng/Kg	0.0368U ng/Kg
DUP13-SA5C-QC-121310(RES)	OCDF	0.898 ng/Kg	0.898U ng/Kg
SED-033-SIV-SD-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDD	0.461 ng/Kg	0.461U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0998 ng/Kg	0.0998U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0327 ng/Kg	0.0327U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.155 ng/Kg	0.155U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.150 ng/Kg	0.150U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.110 ng/Kg	0.110U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0412 ng/Kg	0.0412U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.225 ng/Kg	0.225U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.136 ng/Kg	0.136U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	OCDD	1.36 ng/Kg	1.36U ng/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	OCDF	0.515 ng/Kg	0.515U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,4,6,7,8-HPCDD	0.665 ng/Kg	0.665U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.148 ng/Kg	0.148U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0352 ng/Kg	0.0352U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.169 ng/Kg	0.169U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDD	0.0810 ng/Kg	0.0810U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.133 ng/Kg	0.133U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDD	0.0829 ng/Kg	0.0829U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.140 ng/Kg	0.140U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0381 ng/Kg	0.0381U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_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-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0615 ng/Kg	0.0615U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.144 ng/Kg	0.144U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0215 ng/Kg	0.0215U ng/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	OCDF	0.700 ng/Kg	0.700U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.212 ng/Kg	0.212U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0843 ng/Kg	0.0843U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.231 ng/Kg	0.231U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.161 ng/Kg	0.161U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0932 ng/Kg	0.0932U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.0899 ng/Kg	0.0899U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.296 ng/Kg	0.296U ng/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0234 ng/Kg	0.0234U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	1,2,3,4,6,7,8-HPCDF	0.428 ng/Kg	0.428U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.0739 ng/Kg	0.0739U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HxCDD	0.0294 ng/Kg	0.0294U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.0520 ng/Kg	0.0520U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.0857 ng/Kg	0.0857U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0742 ng/Kg	0.0742U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	2,3,4,6,7,8-HXCDF	0.0838 ng/Kg	0.0838U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.100 ng/Kg	0.100U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	2,3,7,8-TCDD	0.0249 ng/Kg	0.0249U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	2,3,7,8-TCDF	0.0498 ng/Kg	0.0498U ng/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	OCDF	0.999 ng/Kg	0.999U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.145 ng/Kg	0.145U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HxCDD	0.0471 ng/Kg	0.0471U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.163 ng/Kg	0.163U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.143 ng/Kg	0.143U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.0937 ng/Kg	0.0937U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.0346 ng/Kg	0.0346U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0757 ng/Kg	0.0757U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.137 ng/Kg	0.137U ng/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	2,3,7,8-TCDF	0.0321 ng/Kg	0.0321U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8,9-HPCDF	0.246 ng/Kg	0.246U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	1,2,3,4,7,8-HXCDF	0.177 ng/Kg	0.177U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	1,2,3,6,7,8-HXCDF	0.135 ng/Kg	0.135U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8,9-HXCDF	0.231 ng/Kg	0.231U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDD	0.0864 ng/Kg	0.0864U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	1,2,3,7,8-PECDF	0.164 ng/Kg	0.164U ng/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	2,3,4,7,8-PECDF	0.241 ng/Kg	0.241U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8,9-HPCDF	0.194 ng/Kg	0.194U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX021 Laboratory: LL

EDD Filename: DX021_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-SA5C-SB-9.0-10.0(RES)	1,2,3,4,7,8-HXCDF	0.116 ng/Kg	0.116U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	1,2,3,6,7,8-HXCDF	0.128 ng/Kg	0.128U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8,9-HXCDF	0.170 ng/Kg	0.170U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDD	0.119 ng/Kg	0.119U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	1,2,3,7,8-PECDF	0.0980 ng/Kg	0.0980U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	2,3,4,6,7,8-HXCDF	0.162 ng/Kg	0.162U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	2,3,4,7,8-PECDF	0.144 ng/Kg	0.144U ng/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	2,3,7,8-TCDD	0.0237 ng/Kg	0.0237U ng/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0679 ng/Kg	0.0679U ng/Kg
SL-077-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.236 ng/Kg	0.236U ng/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.223 ng/Kg	0.223U ng/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0840 ng/Kg	0.0840U ng/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0365 ng/Kg	0.0365U ng/Kg
SL-091-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.212 ng/Kg	0.212U ng/Kg
SL-091-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0431 ng/Kg	0.0431U ng/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DX021

Laboratory: LL

EDD Filename: DX021_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-006-SA5C-SB-4.0-5.0MSD (SL-006-SA5C-SB-4.0-5.0)	OCDD	-	-	40.00-135.00	23 (20.00)	OCDD	J (all detects)

Internal Standard Outlier Report

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **AQ**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
EB15-SA5B-121310	13C-1,2,7,8-TCDD (CRS) 13C-2,3,7,8-TCDD	9 3	35.00-197.00 25.00-164.00	2,3,7,8-TCDD	J (all detects) UJ(all non-detects)
EB15-SA5B-121310	13C-1,2,3,4,7,8-HxCDD 13C-1,2,3,6,7,8-HxCDD 13C-1,2,3,7,8,9-HxCDD 13C-1,2,3,7,8-PeCDD	24 23 21 15	32.00-141.00 28.00-130.00 28.00-130.00 25.00-181.00	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-PeCDD	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
MOISTURE	11.4	12.8	12		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
1,2,3,4,6,7,8-HPCDF	0.428	0.677	45	50.00	
1,2,3,4,7,8-HxCDD	0.0294	0.0401	31	50.00	
1,2,3,6,7,8-HXCDD	0.362	0.287	23	50.00	
1,2,3,6,7,8-HXCDF	0.0857	0.115	29	50.00	
1,2,3,7,8,9-HXCDD	0.510	0.447	13	50.00	
1,2,3,7,8,9-HXCDF	0.445	0.512	14	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	0.0742	0.0649	13	50.00	
1,2,3,7,8-PECDF	0.294	0.334	13	50.00	
2,3,4,7,8-PECDF	0.100	0.143	35	50.00	
2,3,7,8-TCDF	0.0498	0.0368	30	50.00	
OCDF	0.999	0.898	11	50.00	
1,2,3,4,6,7,8-HPCDD	2.54	1.03	85	50.00	
1,2,3,4,7,8,9-HPCDF	0.0739	0.139	61	50.00	
1,2,3,4,7,8-HXCDF	0.0520	0.160	102	50.00	J(all detects)
2,3,4,6,7,8-HXCDF	0.0838	0.237	96	50.00	UJ(all non-detects)
2,3,7,8-TCDD	0.0249	1.15 U	200	50.00	
OCDD	25.4	8.45	100	50.00	

Reporting Limit Outliers

Lab Reporting Batch ID: DX021 Laboratory: LL

EDD Filename: DX021_v1. eQAPP Name: CDM_SSFL_110509

Method: 1613B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	1,2,3,4,6,7,8-HPCDD	JBQ	1.77	11.5	PQL	pg/L	
	1,2,3,4,6,7,8-HPCDF	JB	3.04	11.5	PQL	pg/L	
	1,2,3,4,7,8,9-HPCDF	JB	0.663	11.5	PQL	pg/L	
	1,2,3,4,7,8-HxCDD	JB	0.514	11.5	PQL	pg/L	
	1,2,3,4,7,8-HXCDF	JBQ	1.09	11.5	PQL	pg/L	
	1,2,3,6,7,8-HXCDD	JB	1.01	11.5	PQL	pg/L	
	1,2,3,6,7,8-HXCDF	JBQ	0.846	11.5	PQL	pg/L	
	1,2,3,7,8,9-HXCDD	JB	0.622	11.5	PQL	pg/L	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.654	11.5	PQL	pg/L	
	1,2,3,7,8-PECDD	JB	2.02	11.5	PQL	pg/L	
	1,2,3,7,8-PECDF	JB	0.591	11.5	PQL	pg/L	
	2,3,4,6,7,8-HXCDF	JB	1.13	11.5	PQL	pg/L	
	2,3,4,7,8-PECDF	JB	0.623	11.5	PQL	pg/L	
	OCDD	JB	7.38	23.0	PQL	pg/L	
	OCDF	JB	1.71	23.0	PQL	pg/L	

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	1,2,3,4,6,7,8-HPCDD	JB	1.03	5.73	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.677	5.73	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.139	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0401	5.73	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.160	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.287	5.73	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.115	5.73	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.447	5.73	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.512	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0649	5.73	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.334	5.73	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.237	5.73	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.143	5.73	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0368	1.15	PQL	ng/Kg	
	OCDD	JB	8.45	11.5	PQL	ng/Kg	
	OCDF	JBQ	0.898	11.5	PQL	ng/Kg	
SED-032-SIV-SD-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.13	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.86	5.72	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.19	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.48	5.72	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.12	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	3.68	5.72	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.369	5.72	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	1.40	5.72	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.11	5.72	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.46	5.72	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	1.23	5.72	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.228	1.14	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.556	1.14	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-033-SIV-SD-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.643	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	1.21	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.741	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.48	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.799	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.01	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.217	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.874	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.460	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.07	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.628	5.31	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.103	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.227	1.06	PQL	ng/Kg	
SL-001-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	0.461	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.790	5.36	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.0998	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0327	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.155	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.117	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.150	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.139	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.110	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0412	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.225	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.136	5.36	PQL	ng/Kg	
	OCDD	JB	1.36	10.7	PQL	ng/Kg	
	OCDF	JB	0.515	10.7	PQL	ng/Kg	
SL-001-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	0.665	6.02	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.892	6.02	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.148	6.02	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0352	6.02	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.169	6.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.0810	6.02	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.133	6.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.0829	6.02	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.140	6.02	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0381	6.02	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0615	6.02	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.282	6.02	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.144	6.02	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0215	1.20	PQL	ng/Kg	
	OCDD	JB	4.85	12.0	PQL	ng/Kg	
	OCDF	JB	0.700	12.0	PQL	ng/Kg	
SL-003-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.96	5.39	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.212	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.0843	5.39	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.231	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.358	5.39	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.187	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.270	5.39	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.161	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0932	5.39	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0899	5.39	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.303	5.39	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.296	5.39	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0234	1.08	PQL	ng/Kg	
	OCDF	JB	3.36	10.8	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDD	JB	2.54	5.64	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.428	5.64	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0739	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0294	5.64	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.0520	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.362	5.64	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.0857	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.510	5.64	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.445	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	0.0742	5.64	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.294	5.64	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.0838	5.64	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.100	5.64	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0249	1.13	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0498	1.13	PQL	ng/Kg	
	OCDF	JB	0.999	11.3	PQL	ng/Kg	
SL-006-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDD	JB	5.23	5.45	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.955	5.45	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.145	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0471	5.45	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.163	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.204	5.45	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.143	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.197	5.45	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0937	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0346	5.45	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0757	5.45	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.241	5.45	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.137	5.45	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0321	1.09	PQL	ng/Kg	
	OCDF	JB	1.53	10.9	PQL	ng/Kg	
SL-007-SA5C-SB-4.0-5.0	1,2,3,4,6,7,8-HPCDF	JB	1.17	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.246	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.112	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.177	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.321	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.135	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.285	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.231	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0864	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.164	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.247	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.241	5.44	PQL	ng/Kg	
	OCDF	JB	2.06	10.9	PQL	ng/Kg	
SL-007-SA5C-SB-9.0-10.0	1,2,3,4,6,7,8-HPCDF	JB	1.71	5.51	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.194	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.126	5.51	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.116	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.557	5.51	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.128	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.353	5.51	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.170	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.119	5.51	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.0980	5.51	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.162	5.51	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.144	5.51	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0237	1.10	PQL	ng/Kg	
	OCDF	JB	4.77	11.0	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.847	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.909	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.629	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.30	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.613	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.31	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.467	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.518	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.378	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.706	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.435	5.32	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0679	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.214	1.06	PQL	ng/Kg	
SL-077-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.96	5.38	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.478	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.443	5.38	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.378	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.946	5.38	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.373	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.884	5.38	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.236	5.38	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.290	5.38	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.247	5.38	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.501	5.38	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.329	5.38	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0969	1.08	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.220	1.08	PQL	ng/Kg	
	OCDF	JB	7.92	10.8	PQL	ng/Kg	
SL-085-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.641	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.301	5.36	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.720	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.32	5.36	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.939	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.836	5.36	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.353	5.36	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.208	5.36	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.774	5.36	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.544	5.36	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.517	5.36	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0844	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.197	1.07	PQL	ng/Kg	
SL-087-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.08	5.46	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.527	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.163	5.46	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.462	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.983	5.46	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.319	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.485	5.46	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.223	5.46	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.0840	5.46	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.489	5.46	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.426	5.46	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.386	5.46	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0365	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.196	1.09	PQL	ng/Kg	
	OCDF	JB	10.4	10.9	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX021 **Laboratory: LL**

EDD Filename: DX021_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-091-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	3.16	5.44	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JBQ	0.430	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.169	5.44	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.354	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.766	5.44	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.317	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.414	5.44	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.212	5.44	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.344	5.44	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.438	5.44	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.333	5.44	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0431	1.09	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.198	1.09	PQL	ng/Kg	
	OCDF	JB	5.66	10.9	PQL	ng/Kg	
SL-095-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	0.995	5.26	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	0.492	5.26	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.509	5.26	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	1.84	5.26	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.603	5.26	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.04	5.26	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.532	5.26	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.369	5.26	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.515	5.26	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.632	5.26	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.503	5.26	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.282	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.146	1.05	PQL	ng/Kg	

SAMPLE DELIVERY GROUP

DX022

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-Dec-2010	SL-119-SA5B-SS-0.0-0.5	6164649	N	METHOD	1613B	III
14-Dec-2010	SL-105-SA5B-SS-0.0-0.5	6164655	N	METHOD	1613B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5	6164645	N	METHOD	1613B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MS	6164646	MS	METHOD	1613B	III
14-Dec-2010	SL-120-SA5B-SS-0.0-0.5MSD	6164647	MSD	METHOD	1613B	III
14-Dec-2010	DUP05-SA5B-QC-121410	6164644	FD	METHOD	1613B	III
14-Dec-2010	SL-108-SA5B-SS-0.0-0.5	6164648	N	METHOD	1613B	III
14-Dec-2010	SL-109-SA5B-SS-0.0-0.5	6164651	N	METHOD	1613B	III
14-Dec-2010	SL-121-SA5B-SS-0.0-0.5	6164653	N	METHOD	1613B	III
14-Dec-2010	SL-054-SA5B-SS-0.0-0.5	6164654	N	METHOD	1613B	III
14-Dec-2010	SL-240-SA5B-SS-0.0-0.5	6164650	N	METHOD	1613B	III
14-Dec-2010	SL-122-SA5B-SS-0.0-0.5	6164652	N	METHOD	1613B	III
14-Dec-2010	SL-123-SA5B-SS-0.0-0.5	6164659	N	METHOD	1613B	III
14-Dec-2010	SL-098-SA5B-SS-0.0-0.5	6164656	N	METHOD	1613B	III
14-Dec-2010	SL-124-SA5B-SS-0.0-0.5	6164660	N	METHOD	1613B	III
14-Dec-2010	SL-142-SA5B-SS-0.0-0.5	6164657	N	METHOD	1613B	III
14-Dec-2010	SL-143-SA5B-SS-0.0-0.5	6164658	N	METHOD	1613B	III
14-Dec-2010	SED-025-SIV-SD-0.0-0.5	6164665	N	METHOD	1613B	III
14-Dec-2010	SL-309-SA5B-SS-0.0-0.5	6164661	N	METHOD	1613B	III
14-Dec-2010	SL-310-SA5B-SS-0.0-0.5	6164663	N	METHOD	1613B	III
14-Dec-2010	SL-311-SA5B-SS-0.0-0.5	6164662	N	METHOD	1613B	III
14-Dec-2010	SL-312-SA5B-SS-0.0-0.5	6164664	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: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: DUP05-SA5B-QC-121410 *Collected:* 12/14/2010 8:50:00 *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	4.47	JB	0.0222	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.410	JB	0.0322	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.228	JB	0.0327	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.356	JBQ	0.0248	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.572	JB	0.0343	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.286	JB	0.0238	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.535	JB	0.0357	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.230	JB	0.0297	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.138	JBQ	0.0322	MDL	5.18	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.134	JB	0.0161	MDL	5.18	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.541	JBQ	0.0242	MDL	5.18	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.300	JBQ	0.0159	MDL	5.18	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0203	U	0.0203	MDL	1.04	PQL	ng/Kg	UJ	FD
2,3,7,8-TCDF	0.0808	JB	0.0242	MDL	1.04	PQL	ng/Kg	U	B
OCDF	10.3	JB	0.0392	MDL	10.4	PQL	ng/Kg	J	Z

Sample ID: SED-025-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 12:44:00 *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	4.55	JB	0.0404	MDL	5.58	PQL	ng/Kg	J	Z
1,2,3,4,6,7,8-HPCDF	1.34	JB	0.0290	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.142	JBQ	0.0444	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.106	JB	0.0309	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.219	JB	0.0273	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.324	JB	0.0326	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.196	JB	0.0244	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.238	JBQ	0.0328	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0589	JB	0.0310	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.156	JBQ	0.0435	MDL	5.58	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.291	JB	0.0230	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.243	JB	0.0262	MDL	5.58	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.690	JB	0.0227	MDL	5.58	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.381	JBQ	0.0598	MDL	1.12	PQL	ng/Kg	U	B
OCDF	2.27	JB	0.0372	MDL	11.2	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-054-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:21:00 *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	1.32	JB	0.0465	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.08	JBQ	0.0449	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.505	JBQ	0.0362	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	4.69	JB	0.0465	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.642	JB	0.0332	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.98	JB	0.0447	MDL	5.33	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.274	JB	0.0391	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.435	JBQ	0.0639	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.330	JB	0.0191	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.856	JB	0.0353	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.367	JB	0.0179	MDL	5.33	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0735	JBQ	0.0319	MDL	1.07	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0546	JB	0.0353	MDL	1.07	PQL	ng/Kg	U	B

Sample ID: SL-098-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 10:43:00 *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	5.52	B	0.0222	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.578	JB	0.0347	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.364	JB	0.0274	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.239	JB	0.0199	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.00	JB	0.0288	MDL	5.17	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.305	JB	0.0177	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.922	JB	0.0282	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.151	JB	0.0236	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.214	JBQ	0.0469	MDL	5.17	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.287	JBQ	0.0150	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.421	JBQ	0.0192	MDL	5.17	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.147	JB	0.0150	MDL	5.17	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0639	JBQ	0.0230	MDL	1.03	PQL	ng/Kg	U	B

Sample ID: SL-105-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
1,2,3,4,7,8,9-HPCDF	1.15	JB	0.0461	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.795	JB	0.0452	MDL	5.22	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-105-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
1,2,3,4,7,8-HXCDF	0.400	JB	0.0350	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	4.14	JB	0.0474	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.588	JB	0.0310	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.63	JBQ	0.0444	MDL	5.22	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.282	JB	0.0376	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.412	JBQ	0.0712	MDL	5.22	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.424	JB	0.0211	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.755	JB	0.0338	MDL	5.22	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.148	JBQ	0.0206	MDL	5.22	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0802	JBQ	0.0366	MDL	1.04	PQL	ng/Kg	U	B

Sample ID: SL-108-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
1,2,3,4,7,8,9-HPCDF	1.13	JB	0.0446	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.722	JB	0.0343	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.526	JB	0.0303	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	3.51	JB	0.0348	MDL	5.23	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.641	JB	0.0280	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.50	JB	0.0369	MDL	5.23	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.431	JB	0.0356	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.343	JBQ	0.0435	MDL	5.23	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.542	JB	0.0172	MDL	5.23	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	1.02	JB	0.0295	MDL	5.23	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.502	JB	0.0167	MDL	5.23	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0648	JB	0.0247	MDL	1.05	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.113	JBQ	0.0315	MDL	1.05	PQL	ng/Kg	U	B

Sample ID: SL-109-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 9:09:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.812	JBQ	0.0448	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.553	JB	0.0497	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.435	JB	0.0296	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.38	JB	0.0518	MDL	5.31	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.461	JB	0.0258	MDL	5.31	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-109-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 9:09:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,7,8,9-HXCDD	0.967	JB	0.0486	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.314	JBQ	0.0323	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.245	JB	0.0408	MDL	5.31	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.247	JB	0.0134	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.772	JBQ	0.0285	MDL	5.31	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.376	JB	0.0138	MDL	5.31	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0406	JBQ	0.0221	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0866	JB	0.0224	MDL	1.06	PQL	ng/Kg	U	B

Sample ID: SL-119-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:30:00 *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	0.549	JBQ	0.0379	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.310	JBQ	0.0346	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.337	JB	0.0325	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.914	JB	0.0357	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.438	JB	0.0285	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.972	JB	0.0363	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.485	JBQ	0.0380	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.213	JBQ	0.0416	MDL	5.41	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.219	JBQ	0.0186	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.610	JBQ	0.0305	MDL	5.41	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.302	JBQ	0.0187	MDL	5.41	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0754	JBQ	0.0316	MDL	1.08	PQL	ng/Kg	U	B

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *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	4.62	JB	0.0204	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.470	JB	0.0350	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.237	JB	0.0350	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.316	JB	0.0261	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.657	JB	0.0367	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.327	JB	0.0229	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.523	JB	0.0344	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.231	JB	0.0307	MDL	5.21	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-120-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 8:47:00 *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	0.101	JBQ	0.0297	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.138	JB	0.0142	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.483	JB	0.0255	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.265	JB	0.0142	MDL	5.21	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0355	JBQ	0.0191	MDL	1.04	PQL	ng/Kg	UJ	B, FD
2,3,7,8-TCDF	0.121	JB	0.0224	MDL	1.04	PQL	ng/Kg	U	B

Sample ID: SL-121-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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	2.20	JB	0.0480	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.826	JB	0.0178	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.124	JBQ	0.0334	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.181	JBQ	0.0266	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.314	JBQ	0.0321	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.176	JB	0.0214	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.438	JB	0.0315	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.330	JB	0.0316	MDL	5.30	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.701	JBQ	0.0137	MDL	5.30	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.160	JB	0.0255	MDL	5.30	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.201	JBQ	0.0151	MDL	5.30	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0222	JBQ	0.0171	MDL	1.06	PQL	ng/Kg	U	B
OCDF	1.64	JB	0.0456	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: SL-122-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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-HPCDD	2.25	JB	0.0417	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	1.17	JB	0.0196	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.205	JB	0.0312	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0834	JBQ	0.0331	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.217	JB	0.0259	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.422	JBQ	0.0341	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.209	JB	0.0230	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.741	JB	0.0341	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.527	JBQ	0.0288	MDL	5.29	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-122-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
1,2,3,7,8-PECDD	0.121	JBQ	0.0324	MDL	5.29	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.344	JBQ	0.0137	MDL	5.29	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.278	JB	0.0248	MDL	5.29	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.255	JB	0.0133	MDL	5.29	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0224	JBQ	0.0164	MDL	1.06	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0494	JB	0.0270	MDL	1.06	PQL	ng/Kg	U	B
OCDF	1.61	JB	0.0406	MDL	10.6	PQL	ng/Kg	U	B

Sample ID: SL-123-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
1,2,3,4,7,8,9-HPCDF	2.94	JB	0.0639	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HxCDD	2.46	JB	0.0419	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	1.70	JB	0.0367	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	1.84	JB	0.0322	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDD	4.83	JB	0.0430	MDL	5.32	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.647	JB	0.0424	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	1.07	JB	0.0597	MDL	5.32	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	1.00	JB	0.0278	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	2.16	JB	0.0357	MDL	5.32	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	2.23	JB	0.0282	MDL	5.32	PQL	ng/Kg	J	Z
2,3,7,8-TCDD	0.159	JB	0.0233	MDL	1.06	PQL	ng/Kg	U	B

Sample ID: SL-124-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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	1.05	JB	0.0360	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.06	JB	0.0285	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.862	JB	0.0261	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.93	JB	0.0295	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.759	JB	0.0238	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	2.43	JB	0.0293	MDL	5.27	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.773	JBQ	0.0300	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.542	JB	0.0496	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.841	JB	0.0201	MDL	5.27	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-124-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
2,3,4,6,7,8-HXCDF	0.840	JB	0.0255	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.831	JBQ	0.0195	MDL	5.27	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0882	JBQ	0.0194	MDL	1.05	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.373	JBQ	0.0449	MDL	1.05	PQL	ng/Kg	U	B

Sample ID: SL-142-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 11:04:00 *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	0.0383	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.707	JB	0.0156	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.103	JB	0.0349	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0550	JBQ	0.0253	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0920	JBQ	0.0216	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.117	JB	0.0264	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0568	JBQ	0.0176	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.0982	JB	0.0260	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.0673	JB	0.0275	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.0512	JBQ	0.0297	MDL	5.33	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.185	JBQ	0.0107	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0798	JB	0.0201	MDL	5.33	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0547	JBQ	0.0116	MDL	5.33	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0267	JBQ	0.0214	MDL	1.07	PQL	ng/Kg	U	B
OCDF	1.67	JBQ	0.0502	MDL	10.7	PQL	ng/Kg	U	B

Sample ID: SL-143-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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	3.24	JB	0.0371	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,6,7,8-HPCDF	0.645	JB	0.0135	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.0660	JBQ	0.0294	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.0525	JBQ	0.0273	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.0609	JBQ	0.0189	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	0.214	JBQ	0.0281	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.0503	JBQ	0.0155	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.324	JB	0.0271	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.201	JB	0.0232	MDL	5.19	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-143-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
1,2,3,7,8-PECDD	0.0773	JBQ	0.0292	MDL	5.19	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.0737	JBQ	0.0101	MDL	5.19	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.0658	JB	0.0187	MDL	5.19	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.0574	JBQ	0.0104	MDL	5.19	PQL	ng/Kg	U	B
OCDF	1.39	JB	0.0402	MDL	10.4	PQL	ng/Kg	U	B

Sample ID: SL-240-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
1,2,3,4,7,8,9-HPCDF	0.907	JB	0.0540	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.08	JB	0.0529	MDL	5.21	PQL	ng/Kg	J	Z
1,2,3,4,7,8-HXCDF	0.602	JB	0.0450	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	3.93	JB	0.0531	MDL	5.21	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.656	JB	0.0415	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.48	JB	0.0520	MDL	5.21	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.298	JBQ	0.0510	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.546	JBQ	0.0842	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.327	JB	0.0294	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.932	JBQ	0.0448	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.539	JB	0.0284	MDL	5.21	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.130	JB	0.0486	MDL	1.04	PQL	ng/Kg	U	B

Sample ID: SL-309-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:25:00 ***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	0.814	JB	0.0231	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.585	JBQ	0.0242	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.701	JB	0.0215	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.50	JB	0.0246	MDL	5.21	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.470	JBQ	0.0194	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.11	JB	0.0241	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.279	JB	0.0222	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.324	JB	0.0285	MDL	5.21	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.222	JB	0.0126	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.546	JB	0.0206	MDL	5.21	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.253	JB	0.0122	MDL	5.21	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-309-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:25:00 *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	0.0594	JBQ	0.0131	MDL	1.04	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0495	JB	0.0193	MDL	1.04	PQL	ng/Kg	U	B

Sample ID: SL-310-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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-HPCDF	4.16	JB	0.0307	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8,9-HPCDF	0.450	JBQ	0.0392	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	0.317	JBQ	0.0403	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.303	JB	0.0342	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	1.07	JB	0.0427	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDF	0.268	JB	0.0327	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	0.759	JB	0.0432	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDF	0.260	JB	0.0354	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.158	JBQ	0.0492	MDL	5.27	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.355	JB	0.0227	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.364	JB	0.0346	MDL	5.27	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.299	JB	0.0216	MDL	5.27	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0262	JBQ	0.0218	MDL	1.05	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.159	JBQ	0.0436	MDL	1.05	PQL	ng/Kg	U	B
OCDF	9.13	JB	0.0404	MDL	10.5	PQL	ng/Kg	J	Z

Sample ID: SL-311-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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-HXCDF	3.73	JB	0.0339	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	3.22	JB	0.0326	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	1.29	JB	0.0356	MDL	5.42	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	2.91	JB	0.0556	MDL	5.42	PQL	ng/Kg	J	Z
1,2,3,7,8-PECDF	0.615	JB	0.0180	MDL	5.42	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	4.52	JB	0.0338	MDL	5.42	PQL	ng/Kg	J	Z
2,3,4,7,8-PECDF	1.00	JB	0.0164	MDL	5.42	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.331	JB	0.0229	MDL	1.08	PQL	ng/Kg	J	Z
2,3,7,8-TCDF	0.279	JB	0.0348	MDL	1.08	PQL	ng/Kg	U	B
OCDD	5310	EB	0.140	MDL	10.8	PQL	ng/Kg	J	*XI

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory:** LL

EDD Filename: DX022_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1613B **Matrix:** SO

Sample ID: SL-312-SA5B-SS-0.0-0.5 **Collected:** 12/14/2010 2:27:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,2,3,4,7,8,9-HPCDF	0.851	JB	0.0382	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,4,7,8-HxCDD	1.03	JB	0.0309	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,4,7,8-HXCDF	0.582	JB	0.0298	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,6,7,8-HXCDD	2.12	JB	0.0321	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,6,7,8-HXCDF	0.579	JB	0.0281	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,7,8,9-HXCDD	1.93	JB	0.0322	MDL	5.26	PQL	ng/Kg	J	Z
1,2,3,7,8,9-HXCDF	0.226	JBQ	0.0343	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,7,8-PECDD	0.462	JB	0.0396	MDL	5.26	PQL	ng/Kg	U	B
1,2,3,7,8-PECDF	0.212	JB	0.0160	MDL	5.26	PQL	ng/Kg	U	B
2,3,4,6,7,8-HXCDF	0.785	JB	0.0286	MDL	5.26	PQL	ng/Kg	U	B
2,3,4,7,8-PECDF	0.286	JBQ	0.0151	MDL	5.26	PQL	ng/Kg	U	B
2,3,7,8-TCDD	0.0561	JB	0.0169	MDL	1.05	PQL	ng/Kg	U	B
2,3,7,8-TCDF	0.0388	JB	0.0239	MDL	1.05	PQL	ng/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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
*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	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
E	Laboratory Control Precision
E	Laboratory Duplicate Precision
E	Matrix Spike Precision
F	Equipment Blank Contamination
F	Field Blank Contamination

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

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
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

Data Qualifier Summary

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

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

Enclosure I

EPA Level III ADR Outliers
(including Manual Review Outliers)

Quality Control
Outlier Reports

DX022

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BLANKAB372126	1/17/2011 9:26:00 PM	1,2,3,4,6,7,8-HPCDD	0.682 ng/Kg	DUP05-SA5B-QC-121410
		1,2,3,4,6,7,8-HPCDF	1.19 ng/Kg	SED-025-SIV-SD-0.0-0.5
		1,2,3,4,7,8,9-HPCDF	0.343 ng/Kg	SL-054-SA5B-SS-0.0-0.5
		1,2,3,4,7,8-HxCDD	0.206 ng/Kg	SL-098-SA5B-SS-0.0-0.5
		1,2,3,4,7,8-HXCDF	0.370 ng/Kg	SL-105-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HXCDD	0.259 ng/Kg	SL-108-SA5B-SS-0.0-0.5
		1,2,3,6,7,8-HXCDF	0.338 ng/Kg	SL-109-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDD	0.247 ng/Kg	SL-119-SA5B-SS-0.0-0.5
		1,2,3,7,8,9-HXCDF	0.320 ng/Kg	SL-120-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDD	0.244 ng/Kg	SL-121-SA5B-SS-0.0-0.5
		1,2,3,7,8-PECDF	0.242 ng/Kg	SL-122-SA5B-SS-0.0-0.5
		2,3,4,6,7,6-HXCDF	0.498 ng/Kg	SL-123-SA5B-SS-0.0-0.5
		2,3,4,7,8-PECDF	0.330 ng/Kg	SL-124-SA5B-SS-0.0-0.5
		2,3,7,8-TCDD	0.0349 ng/Kg	SL-142-SA5B-SS-0.0-0.5
		2,3,7,8-TCDF	0.0662 ng/Kg	SL-143-SA5B-SS-0.0-0.5
		OCDD	1.49 ng/Kg	SL-240-SA5B-SS-0.0-0.5
		OCDF	1.16 ng/Kg	SL-309-SA5B-SS-0.0-0.5
				SL-310-SA5B-SS-0.0-0.5
				SL-311-SA5B-SS-0.0-0.5
				SL-312-SA5B-SS-0.0-0.5
PBB371751	2/5/2011 5:51:00 PM	2,3,7,8-TCDF	0.0805 ng/Kg	DUP05-SA5B-QC-121410
				SED-025-SIV-SD-0.0-0.5
				SL-054-SA5B-SS-0.0-0.5
				SL-098-SA5B-SS-0.0-0.5
				SL-105-SA5B-SS-0.0-0.5
				SL-108-SA5B-SS-0.0-0.5
				SL-109-SA5B-SS-0.0-0.5
				SL-119-SA5B-SS-0.0-0.5
				SL-120-SA5B-SS-0.0-0.5
				SL-121-SA5B-SS-0.0-0.5
				SL-122-SA5B-SS-0.0-0.5
				SL-123-SA5B-SS-0.0-0.5
				SL-124-SA5B-SS-0.0-0.5
				SL-142-SA5B-SS-0.0-0.5
				SL-143-SA5B-SS-0.0-0.5
				SL-240-SA5B-SS-0.0-0.5
				SL-309-SA5B-SS-0.0-0.5
				SL-310-SA5B-SS-0.0-0.5
				SL-311-SA5B-SS-0.0-0.5
				SL-312-SA5B-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
DUP05-SA5B-QC-121410(RES)	1,2,3,4,6,7,8-HPCDF	4.47 ng/Kg	4.47U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,4,7,8,9-HPCDF	0.410 ng/Kg	0.410U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,4,7,8-HxCDD	0.228 ng/Kg	0.228U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,4,7,8-HXCDF	0.356 ng/Kg	0.356U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,6,7,8-HXCDD	0.572 ng/Kg	0.572U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,6,7,8-HXCDF	0.286 ng/Kg	0.286U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,7,8,9-HXCDD	0.535 ng/Kg	0.535U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,7,8,9-HXCDF	0.230 ng/Kg	0.230U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,7,8-PECDD	0.138 ng/Kg	0.138U ng/Kg
DUP05-SA5B-QC-121410(RES)	1,2,3,7,8-PECDF	0.134 ng/Kg	0.134U ng/Kg
DUP05-SA5B-QC-121410(RES)	2,3,4,6,7,8-HXCDF	0.541 ng/Kg	0.541U ng/Kg
DUP05-SA5B-QC-121410(RES)	2,3,4,7,8-PECDF	0.300 ng/Kg	0.300U ng/Kg
DUP05-SA5B-QC-121410(RES)	2,3,7,8-TCDF	0.0808 ng/Kg	0.0808U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.34 ng/Kg	1.34U ng/Kg

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.142 ng/Kg	0.142U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.106 ng/Kg	0.106U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.219 ng/Kg	0.219U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.324 ng/Kg	0.324U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.196 ng/Kg	0.196U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.238 ng/Kg	0.238U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0589 ng/Kg	0.0589U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.156 ng/Kg	0.156U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.291 ng/Kg	0.291U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.243 ng/Kg	0.243U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.690 ng/Kg	0.690U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	2,3,7,8-TCDF	0.381 ng/Kg	0.381U ng/Kg
SED-025-SIV-SD-0.0-0.5(RES)	OCDF	2.27 ng/Kg	2.27U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	1.32 ng/Kg	1.32U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.505 ng/Kg	0.505U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.642 ng/Kg	0.642U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.274 ng/Kg	0.274U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.435 ng/Kg	0.435U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.330 ng/Kg	0.330U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.856 ng/Kg	0.856U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.367 ng/Kg	0.367U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0735 ng/Kg	0.0735U ng/Kg
SL-054-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0546 ng/Kg	0.0546U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	5.52 ng/Kg	5.52U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.578 ng/Kg	0.578U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.364 ng/Kg	0.364U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.239 ng/Kg	0.239U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.305 ng/Kg	0.305U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.922 ng/Kg	0.922U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.151 ng/Kg	0.151U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.214 ng/Kg	0.214U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.287 ng/Kg	0.287U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.421 ng/Kg	0.421U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.147 ng/Kg	0.147U ng/Kg
SL-098-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0639 ng/Kg	0.0639U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	1.15 ng/Kg	1.15U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.795 ng/Kg	0.795U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.400 ng/Kg	0.400U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.588 ng/Kg	0.588U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.282 ng/Kg	0.282U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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-105-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.412 ng/Kg	0.412U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.424 ng/Kg	0.424U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.755 ng/Kg	0.755U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.148 ng/Kg	0.148U ng/Kg
SL-105-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0802 ng/Kg	0.0802U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	1.13 ng/Kg	1.13U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.722 ng/Kg	0.722U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.526 ng/Kg	0.526U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.641 ng/Kg	0.641U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.431 ng/Kg	0.431U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.343 ng/Kg	0.343U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.542 ng/Kg	0.542U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	1.02 ng/Kg	1.02U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.502 ng/Kg	0.502U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0648 ng/Kg	0.0648U ng/Kg
SL-108-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.113 ng/Kg	0.113U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.812 ng/Kg	0.812U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.553 ng/Kg	0.553U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.435 ng/Kg	0.435U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.461 ng/Kg	0.461U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.967 ng/Kg	0.967U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.314 ng/Kg	0.314U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.245 ng/Kg	0.245U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.247 ng/Kg	0.247U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.772 ng/Kg	0.772U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.376 ng/Kg	0.376U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0406 ng/Kg	0.0406U ng/Kg
SL-109-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0866 ng/Kg	0.0866U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.549 ng/Kg	0.549U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.310 ng/Kg	0.310U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.337 ng/Kg	0.337U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.914 ng/Kg	0.914U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.438 ng/Kg	0.438U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.972 ng/Kg	0.972U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.485 ng/Kg	0.485U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.213 ng/Kg	0.213U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.219 ng/Kg	0.219U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.610 ng/Kg	0.610U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.302 ng/Kg	0.302U ng/Kg
SL-119-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0754 ng/Kg	0.0754U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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-120-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	4.62 ng/Kg	4.62U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.470 ng/Kg	0.470U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.237 ng/Kg	0.237U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.318 ng/Kg	0.316U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.657 ng/Kg	0.657U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.327 ng/Kg	0.327U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.523 ng/Kg	0.523U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.231 ng/Kg	0.231U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.101 ng/Kg	0.101U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.138 ng/Kg	0.138U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.483 ng/Kg	0.483U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.265 ng/Kg	0.285U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0355 ng/Kg	0.0355U ng/Kg
SL-120-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.121 ng/Kg	0.121U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	2.20 ng/Kg	2.20U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.826 ng/Kg	0.826U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.124 ng/Kg	0.124U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.181 ng/Kg	0.181U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.314 ng/Kg	0.314U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.176 ng/Kg	0.176U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.438 ng/Kg	0.438U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.330 ng/Kg	0.330U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.701 ng/Kg	0.701U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.160 ng/Kg	0.160U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.201 ng/Kg	0.201U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0222 ng/Kg	0.0222U ng/Kg
SL-121-SA5B-SS-0.0-0.5(RES)	OCDF	1.64 ng/Kg	1.64U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	2.25 ng/Kg	2.25U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	1.17 ng/Kg	1.17U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.205 ng/Kg	0.205U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0834 ng/Kg	0.0834U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.217 ng/Kg	0.217U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.422 ng/Kg	0.422U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.209 ng/Kg	0.209U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.741 ng/Kg	0.741U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.527 ng/Kg	0.527U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.121 ng/Kg	0.121U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.344 ng/Kg	0.344U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.278 ng/Kg	0.278U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.255 ng/Kg	0.255U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0224 ng/Kg	0.0224U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0494 ng/Kg	0.0494U ng/Kg
SL-122-SA5B-SS-0.0-0.5(RES)	OCDF	1.61 ng/Kg	1.61U ng/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	1.70 ng/Kg	1.70U ng/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.647 ng/Kg	0.647U ng/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	1.07 ng/Kg	1.07U ng/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	1.00 ng/Kg	1.00U ng/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	2.16 ng/Kg	2.16U ng/Kg
SL-123-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.159 ng/Kg	0.159U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	1.05 ng/Kg	1.05U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.862 ng/Kg	0.862U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.759 ng/Kg	0.759U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.773 ng/Kg	0.773U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.542 ng/Kg	0.542U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.841 ng/Kg	0.841U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.840 ng/Kg	0.840U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.831 ng/Kg	0.831U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0882 ng/Kg	0.0862U ng/Kg
SL-124-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.373 ng/Kg	0.373U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	3.01 ng/Kg	3.01U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.707 ng/Kg	0.707U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.103 ng/Kg	0.103U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0550 ng/Kg	0.0550U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0920 ng/Kg	0.0920U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.117 ng/Kg	0.117U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0568 ng/Kg	0.0568U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.0982 ng/Kg	0.0962U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.0673 ng/Kg	0.0673U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0512 ng/Kg	0.0512U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.185 ng/Kg	0.185U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0798 ng/Kg	0.0798U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0547 ng/Kg	0.0547U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0267 ng/Kg	0.0267U ng/Kg
SL-142-SA5B-SS-0.0-0.5(RES)	OCDF	1.67 ng/Kg	1.67U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDD	3.24 ng/Kg	3.24U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	0.645 ng/Kg	0.645U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.0660 ng/Kg	0.0660U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.0525 ng/Kg	0.0525U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.0609 ng/Kg	0.0609U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	0.214 ng/Kg	0.214U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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-143-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.0503 ng/Kg	0.0503U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.324 ng/Kg	0.324U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.201 ng/Kg	0.201U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.0773 ng/Kg	0.0773U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.0737 ng/Kg	0.0737U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.0658 ng/Kg	0.0658U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.0574 ng/Kg	0.0574U ng/Kg
SL-143-SA5B-SS-0.0-0.5(RES)	OCDF	1.39 ng/Kg	1.39U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.907 ng/Kg	0.907U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.602 ng/Kg	0.602U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.656 ng/Kg	0.656U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.298 ng/Kg	0.298U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.546 ng/Kg	0.546U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.327 ng/Kg	0.327U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.932 ng/Kg	0.932U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.539 ng/Kg	0.539U ng/Kg
SL-240-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.130 ng/Kg	0.130U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.814 ng/Kg	0.814U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.585 ng/Kg	0.585U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.701 ng/Kg	0.701U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.470 ng/Kg	0.470U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	1.11 ng/Kg	1.11U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.279 ng/Kg	0.279U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.324 ng/Kg	0.324U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.222 ng/Kg	0.222U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.546 ng/Kg	0.546U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.253 ng/Kg	0.253U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0594 ng/Kg	0.0594U ng/Kg
SL-309-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0495 ng/Kg	0.0495U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,4,6,7,8-HPCDF	4.16 ng/Kg	4.16U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.450 ng/Kg	0.450U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	0.317 ng/Kg	0.317U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.303 ng/Kg	0.303U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDD	1.07 ng/Kg	1.07U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.268 ng/Kg	0.268U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDD	0.759 ng/Kg	0.759U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.260 ng/Kg	0.260U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.158 ng/Kg	0.158U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.355 ng/Kg	0.355U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.364 ng/Kg	0.364U ng/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_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-310-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.299 ng/Kg	0.299U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0262 ng/Kg	0.0262U ng/Kg
SL-310-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.159 ng/Kg	0.159U ng/Kg
SL-311-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	1.29 ng/Kg	1.29U ng/Kg
SL-311-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.615 ng/Kg	0.615U ng/Kg
SL-311-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	1.00 ng/Kg	1.00U ng/Kg
SL-311-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.279 ng/Kg	0.279U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8,9-HPCDF	0.851 ng/Kg	0.851U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HxCDD	1.03 ng/Kg	1.03U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,4,7,8-HXCDF	0.582 ng/Kg	0.582U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,6,7,8-HXCDF	0.579 ng/Kg	0.579U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8,9-HXCDF	0.226 ng/Kg	0.226U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDD	0.462 ng/Kg	0.462U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	1,2,3,7,8-PECDF	0.212 ng/Kg	0.212U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	2,3,4,6,7,8-HXCDF	0.785 ng/Kg	0.785U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	2,3,4,7,8-PECDF	0.286 ng/Kg	0.286U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDD	0.0561 ng/Kg	0.0561U ng/Kg
SL-312-SA5B-SS-0.0-0.5(RES)	2,3,7,8-TCDF	0.0388 ng/Kg	0.0388U ng/Kg

Field Duplicate RPD Report

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
MOISTURE	4.1	3.4	19		No Qualifiers Applied

Method: 1613B
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-120-SA5B-SS-0.0-0.5	DUP05-SA5B-QC-121410			
1,2,3,4,6,7,8-HPCDD	18.5	16.7	10	50.00	
1,2,3,4,6,7,8-HPCDF	4.62	4.47	3	50.00	
1,2,3,4,7,8,9-HPCDF	0.470	0.410	14	50.00	
1,2,3,4,7,8-HxCDD	0.237	0.228	4	50.00	
1,2,3,4,7,8-HXCDF	0.316	0.356	12	50.00	
1,2,3,6,7,8-HXCDD	0.657	0.572	14	50.00	
1,2,3,6,7,8-HXCDF	0.327	0.286	13	50.00	
1,2,3,7,8,9-HXCDD	0.523	0.535	2	50.00	
1,2,3,7,8,9-HXCDF	0.231	0.230	0	50.00	No Qualifiers Applied
1,2,3,7,8-PECDD	0.101	0.138	31	50.00	
1,2,3,7,8-PECDF	0.138	0.134	3	50.00	
2,3,4,6,7,8-HXCDF	0.483	0.541	11	50.00	
2,3,4,7,8-PECDF	0.265	0.300	12	50.00	
2,3,7,8-TCDF	0.121	0.0808	40	50.00	
OCDD	199	172	15	50.00	
OCDF	11.5	10.3	11	50.00	
2,3,7,8-TCDD	0.0355	1.04 U	200	50.00	J(all detects) UJ(all non-detects)

Project Name and Number: 1203-004-007-AL - SSFL Area IV Collocated Soil Sampling

Reporting Limit Outliers

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP05-SA5B-QC-121410	1,2,3,4,6,7,8-HPCDF	JB	4.47	5.18	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.410	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.228	5.18	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.356	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.572	5.18	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.286	5.18	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.535	5.18	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.230	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.138	5.18	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.134	5.18	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.541	5.18	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.300	5.18	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0808	1.04	PQL	ng/Kg	
	OCDF	JB	10.3	10.4	PQL	ng/Kg	
SED-025-SIV-SD-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	4.55	5.58	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.34	5.58	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.142	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.106	5.58	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.219	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.324	5.58	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.196	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	0.238	5.58	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.0589	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.156	5.58	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.291	5.58	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.243	5.58	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.690	5.58	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.381	1.12	PQL	ng/Kg	
	OCDF	JB	2.27	11.2	PQL	ng/Kg	
SL-054-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.32	5.33	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JBQ	1.08	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.505	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.69	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.642	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.98	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.274	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.435	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.330	5.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.856	5.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.367	5.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0735	1.07	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0546	1.07	PQL	ng/Kg	
SL-098-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.578	5.17	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	0.364	5.17	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.239	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.00	5.17	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.305	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.922	5.17	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.151	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.214	5.17	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.287	5.17	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.421	5.17	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.147	5.17	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0639	1.03	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-105-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.15	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.795	5.22	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.400	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	4.14	5.22	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.588	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JBQ	1.63	5.22	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.282	5.22	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.412	5.22	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.424	5.22	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.755	5.22	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.148	5.22	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0802	1.04	PQL	ng/Kg	
SL-108-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.13	5.23	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.722	5.23	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.526	5.23	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.51	5.23	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.641	5.23	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.50	5.23	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.431	5.23	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.343	5.23	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.542	5.23	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	1.02	5.23	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.502	5.23	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.0648	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.113	1.05	PQL	ng/Kg	
SL-109-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	0.812	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.553	5.31	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.435	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.38	5.31	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.461	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.967	5.31	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.314	5.31	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.245	5.31	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.247	5.31	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.772	5.31	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.376	5.31	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0406	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0866	1.06	PQL	ng/Kg	
SL-119-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JBQ	0.549	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.310	5.41	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.337	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.914	5.41	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.438	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.972	5.41	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.485	5.41	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.213	5.41	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.219	5.41	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.610	5.41	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.302	5.41	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.0754	1.08	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 1613B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-120-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDF	JB	4.62	5.21	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8,9-HPCDF	JB	0.470	5.21	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	0.237	5.21	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.316	5.21	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.657	5.21	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.327	5.21	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.523	5.21	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.231	5.21	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.101	5.21	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.138	5.21	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.483	5.21	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.265	5.21	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0355	1.04	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.121	1.04	PQL	ng/Kg	
SL-121-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.20	5.30	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	0.826	5.30	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.124	5.30	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.181	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.314	5.30	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.176	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.438	5.30	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.330	5.30	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.701	5.30	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.160	5.30	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.201	5.30	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0222	1.06	PQL	ng/Kg	
	OCDF	JB	1.64	10.6	PQL	ng/Kg	
SL-122-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	2.25	5.29	PQL	ng/Kg	J (all detects)
	1,2,3,4,6,7,8-HPCDF	JB	1.17	5.29	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.205	5.29	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0834	5.29	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.217	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.422	5.29	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.209	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.741	5.29	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.527	5.29	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.121	5.29	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.344	5.29	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.278	5.29	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.255	5.29	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0224	1.06	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.0494	1.06	PQL	ng/Kg	
	OCDF	JB	1.61	10.6	PQL	ng/Kg	
SL-123-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	2.94	5.32	PQL	ng/Kg	J (all detects)
	1,2,3,4,7,8-HxCDD	JB	2.46	5.32	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	1.70	5.32	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	1.84	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	4.83	5.32	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JB	0.647	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JB	1.07	5.32	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	1.00	5.32	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	2.16	5.32	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	2.23	5.32	PQL	ng/Kg	
	2,3,7,8-TCDD	JB	0.159	1.06	PQL	ng/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DX022 **Laboratory: LL**

EDD Filename: DX022_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **1613B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-124-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	1.05	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.06	5.27	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.862	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	2.93	5.27	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.759	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	2.43	5.27	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.773	5.27	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JB	0.542	5.27	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.841	5.27	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.840	5.27	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.831	5.27	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0882	1.05	PQL	ng/Kg	
	2,3,7,8-TCDF	JBQ	0.373	1.05	PQL	ng/Kg	
SL-142-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.01	5.33	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.707	5.33	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JB	0.103	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0550	5.33	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0920	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	0.117	5.33	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0568	5.33	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.0982	5.33	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.0673	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0512	5.33	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.185	5.33	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0798	5.33	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0547	5.33	PQL	ng/Kg	
	2,3,7,8-TCDD	JBQ	0.0267	1.07	PQL	ng/Kg	
	OCDF	JBQ	1.67	10.7	PQL	ng/Kg	
SL-143-SA5B-SS-0.0-0.5	1,2,3,4,6,7,8-HPCDD	JB	3.24	5.19	PQL	ng/Kg	
	1,2,3,4,6,7,8-HPCDF	JB	0.645	5.19	PQL	ng/Kg	
	1,2,3,4,7,8,9-HPCDF	JBQ	0.0660	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JBQ	0.0525	5.19	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JBQ	0.0609	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JBQ	0.214	5.19	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JBQ	0.0503	5.19	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	0.324	5.19	PQL	ng/Kg	J (all detects)
	1,2,3,7,8,9-HXCDF	JB	0.201	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDD	JBQ	0.0773	5.19	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JBQ	0.0737	5.19	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JB	0.0658	5.19	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JBQ	0.0574	5.19	PQL	ng/Kg	
	OCDF	JB	1.39	10.4	PQL	ng/Kg	
SL-240-SA5B-SS-0.0-0.5	1,2,3,4,7,8,9-HPCDF	JB	0.907	5.21	PQL	ng/Kg	
	1,2,3,4,7,8-HxCDD	JB	1.08	5.21	PQL	ng/Kg	
	1,2,3,4,7,8-HXCDF	JB	0.602	5.21	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDD	JB	3.93	5.21	PQL	ng/Kg	
	1,2,3,6,7,8-HXCDF	JB	0.656	5.21	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDD	JB	1.48	5.21	PQL	ng/Kg	
	1,2,3,7,8,9-HXCDF	JBQ	0.298	5.21	PQL	ng/Kg	J (all detects)
	1,2,3,7,8-PECDD	JBQ	0.546	5.21	PQL	ng/Kg	
	1,2,3,7,8-PECDF	JB	0.327	5.21	PQL	ng/Kg	
	2,3,4,6,7,8-HXCDF	JBQ	0.932	5.21	PQL	ng/Kg	
	2,3,4,7,8-PECDF	JB	0.539	5.21	PQL	ng/Kg	
	2,3,7,8-TCDF	JB	0.130	1.04	PQL	ng/Kg	