Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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
SELENIUM	0.0983	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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
MOLYBDENUM	0.471		0.0535	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 9:55:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	105		0.116	MDL	0.428	PQL	mg/Kg	J	E, E

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 10:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0882	J	0.0626	MDL	0.209	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.87		0.0626	MDL	0.417	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.644		0.0167	MDL	0.104	PQL	mg/Kg	J	E
CADMIUM	0.247		0.0376	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	18.3		0.125	MDL	0.417	PQL	mg/Kg	J	Q, E, A
COBALT	10.5		0.0209	MDL	0.104	PQL	mg/Kg	J	E, A
COPPER	6.92		0.0688	MDL	0.417	PQL	mg/Kg	J	E, A
LEAD	4.60		0.0108	MDL	0.209	PQL	mg/Kg	J	Q, E
NICKEL	12.4		0.104	MDL	0.417	PQL	mg/Kg	J	Q, A
SILVER	0.0607	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.251		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	34.6		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	51.0		0.584	MDL	3.13	PQL	mg/Kg	J	E, A

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 10:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0615	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z, Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-020-SA5C-SB-7.5-8.5 ***Collected:*** 12/8/2010 10:00:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.437		0.0522	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-020-SA5C-SB-7.5-8.5 ***Collected:*** 12/8/2010 10:00:00 ***Analysis Type:*** REA9 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	184		0.113	MDL	0.417	PQL	mg/Kg	J	E, E

Sample ID: SL-021-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 11:55:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0622	U	0.0622	MDL	0.207	PQL	mg/Kg	R	Q
ARSENIC	5.77		0.0622	MDL	0.415	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.484		0.0166	MDL	0.104	PQL	mg/Kg	J	E
CADMIUM	0.142		0.0373	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	19.9		0.124	MDL	0.415	PQL	mg/Kg	J	Q, E, A
COBALT	6.95		0.0207	MDL	0.104	PQL	mg/Kg	J	E, A
COPPER	12.8		0.0685	MDL	0.415	PQL	mg/Kg	J	E, A
LEAD	6.77		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, E
NICKEL	11.0		0.104	MDL	0.415	PQL	mg/Kg	J	Q, A
SILVER	0.0297	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.340		0.0311	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	44.4		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	80.9		0.581	MDL	3.11	PQL	mg/Kg	J	E, A

Sample ID: SL-021-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 11:55:00 ***Analysis Type:*** REA7 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-021-SA5C-SB-4.0-5.0 ***Collected:*** 12/8/2010 11:55:00 ***Analysis Type:*** REA8 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.555		0.0519	MDL	0.104	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 11:55:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.112	MDL	0.415	PQL	mg/Kg	J	E, E

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0986	J	0.0643	MDL	0.214	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.61		0.0643	MDL	0.429	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.631		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.194		0.0386	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	22.8		0.129	MDL	0.429	PQL	mg/Kg	J	Q, E, A
COBALT	6.48		0.0214	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	10.0		0.0707	MDL	0.429	PQL	mg/Kg	J	E, A
LEAD	7.51		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	12.7		0.107	MDL	0.429	PQL	mg/Kg	J	Q, A
SILVER	0.0462	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.276		0.0321	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	41.1		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, E
ZINC	70.7		0.600	MDL	3.21	PQL	mg/Kg	J	E, A

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.115	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.570		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.116	MDL	0.429	PQL	mg/Kg	J	E, 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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0652	U	0.0652	MDL	0.217	PQL	mg/Kg	R	Q, Q, E
ARSENIC	4.17		0.0652	MDL	0.435	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.614		0.0174	MDL	0.109	PQL	mg/Kg	J	E
CADMIUM	0.141		0.0391	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	18.1		0.130	MDL	0.435	PQL	mg/Kg	J	Q, E, A
COBALT	7.13		0.0217	MDL	0.109	PQL	mg/Kg	J	E, A
COPPER	8.85		0.0717	MDL	0.435	PQL	mg/Kg	J	E, A
LEAD	5.49		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E
NICKEL	13.1		0.109	MDL	0.435	PQL	mg/Kg	J	Q, A
SILVER	0.0448	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.358		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	35.3		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, E
ZINC	50.4		0.609	MDL	3.26	PQL	mg/Kg	J	E, A

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0902	J	0.0435	MDL	0.435	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.549		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.117	MDL	0.435	PQL	mg/Kg	J	E, E

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0675	U	0.0675	MDL	0.225	PQL	mg/Kg	R	Q
ARSENIC	6.05		0.0675	MDL	0.450	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.820		0.0180	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.150		0.0405	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	27.4		0.135	MDL	0.450	PQL	mg/Kg	J	Q, E, A
COBALT	9.00		0.0225	MDL	0.113	PQL	mg/Kg	J	E, A
COPPER	9.02		0.0743	MDL	0.450	PQL	mg/Kg	J	E, A
LEAD	7.23		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	16.9		0.113	MDL	0.450	PQL	mg/Kg	J	Q, A
SILVER	0.0425	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.380		0.0338	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	52.5		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, E
ZINC	62.6		0.630	MDL	3.38	PQL	mg/Kg	J	E, A

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.116	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.09		0.0563	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.122	MDL	0.450	PQL	mg/Kg	J	E, E

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
ANTIMONY	0.112	J	0.0625	MDL	0.208	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	10.0		0.0625	MDL	0.417	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.429		0.0167	MDL	0.104	PQL	mg/Kg	J	E
CADMIUM	0.134		0.0375	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	26.1		0.125	MDL	0.417	PQL	mg/Kg	J	Q, E, A
COBALT	5.77		0.0208	MDL	0.104	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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	11.4		0.0688	MDL	0.417	PQL	mg/Kg	J	E, A
LEAD	6.49		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E
NICKEL	13.3		0.104	MDL	0.417	PQL	mg/Kg	J	Q, A
SILVER	0.0278	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.250		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	40.7		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	55.7		0.584	MDL	3.13	PQL	mg/Kg	J	E, A

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:27:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.891		0.0417	MDL	0.417	PQL	mg/Kg	J	Q, E

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
MOLYBDENUM	1.84		0.0521	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:27:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.5		0.113	MDL	0.417	PQL	mg/Kg	J	E, E

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.138	J	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.04		0.0637	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.508		0.0170	MDL	0.106	PQL	mg/Kg	J	E
CHROMIUM	23.0		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E, A
COBALT	6.55		0.0212	MDL	0.106	PQL	mg/Kg	J	E, A
COPPER	10.7		0.0700	MDL	0.424	PQL	mg/Kg	J	E, A
LEAD	7.21		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	13.7		0.106	MDL	0.424	PQL	mg/Kg	J	Q, A
SILVER	0.0315	J	0.0127	MDL	0.106	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.314		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	38.9		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	72.8		0.594	MDL	3.18	PQL	mg/Kg	J	E, A

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.177		0.0382	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.10		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.115	MDL	0.424	PQL	mg/Kg	J	E, E

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0787	J	0.0640	MDL	0.213	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.94		0.0640	MDL	0.426	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.456		0.0171	MDL	0.107	PQL	mg/Kg	J	E
CADMIUM	0.164		0.0384	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	34.0		0.128	MDL	0.426	PQL	mg/Kg	J	Q, E, A
COBALT	7.16		0.0213	MDL	0.107	PQL	mg/Kg	J	E, A
COPPER	10.8		0.0704	MDL	0.426	PQL	mg/Kg	J	E, A
LEAD	5.89		0.0111	MDL	0.213	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:00:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NICKEL	17.7		0.107	MDL	0.426	PQL	mg/Kg	J	Q, A
SILVER	0.0195	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.262		0.0320	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	44.2		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, E
ZINC	59.3		0.597	MDL	3.20	PQL	mg/Kg	J	E, A

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:00:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.174	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:00:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.83		0.0533	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 2:00:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	106		0.115	MDL	0.426	PQL	mg/Kg	J	E, E

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0978	J	0.0632	MDL	0.211	PQL	mg/Kg	UJ	Q, Q, E, B
ARSENIC	5.16		0.0632	MDL	0.421	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.501		0.0169	MDL	0.105	PQL	mg/Kg	J	E
CADMIUM	0.163		0.0379	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	21.7		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	6.39		0.0211	MDL	0.105	PQL	mg/Kg	J	E, A
COPPER	9.76		0.0695	MDL	0.421	PQL	mg/Kg	J	E, A
LEAD	6.36		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	12.4		0.105	MDL	0.421	PQL	mg/Kg	J	Q, A
SILVER	0.0308	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.315		0.0316	MDL	0.105	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:45:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	38.5		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, E
ZINC	71.2		0.590	MDL	3.16	PQL	mg/Kg	J	E, A

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:45:00 *Analysis Type:* REA7 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.128	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z, Q, E

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:45:00 *Analysis Type:* REA8 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.16		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:45:00 *Analysis Type:* REA9 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	107		0.114	MDL	0.421	PQL	mg/Kg	J	E, E

Method Category: METALS

Method: 7199 **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
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.37	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.36	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **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
HEXAVALENT CHROMIUM	0.33	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **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
MERCURY	0.0048	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

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
MERCURY	0.0072	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

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
MERCURY	0.0073	J	0.0029	MDL	0.0998	PQL	mg/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
MERCURY	0.0070	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

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
MERCURY	0.0041	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** AQ

Sample ID: EB14-SA5C-120810 *Collected:* 12/8/2010 12:00:00 *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	1.57		0.549	MDL	1.10	PQL	ng/L	UJ	L, E, B

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	26.8	J	20.4	MDL	40.7	PQL	ng/Kg	J	Z

Sample ID: SL-015-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 2:33:00 *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	24.8	J	18.4	MDL	36.8	PQL	ng/Kg	J	Z

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 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
N-NITROSODIMETHYLAMINE	31.3	J	18.1	MDL	36.3	PQL	ng/Kg	J	Z

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	22.3	J	18.3	MDL	36.5	PQL	ng/Kg	J	Z

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
N-NITROSODIMETHYLAMINE	21.8	J	18.2	MDL	36.4	PQL	ng/Kg	J	Z

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 11:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	22.9	J	17.8	MDL	35.6	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** AQ

Sample ID: EB14-SA5C-120810 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHYLENE GLYCOL	10	U	10	MDL	100	PQL	mg/L	UJ	Q

Sample ID: TB-120810 *Collected:* 12/8/2010 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-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.48	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.53	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *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)	5.8	J	2.2	MDL	6.6	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 9:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 10:00:00 *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	0.44	MDL	1.3	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 11:55:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C15-C20)	0.48	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *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)	0.63	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *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)	0.66	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.75	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIETHYLENE GLYCOL	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	Q
ETHYLENE GLYCOL	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	Q
Propylene glycol	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	Q

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.48	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BETA-BHC	0.071	J	0.066	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *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'-DDT	0.13	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z, L
MIREX	0.10	J	0.072	MDL	0.37	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 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 1260	0.75	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *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	1.1	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z
AROCLOR 1260	0.81	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *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 1254	1.2	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.76	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:52:00 *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 1254	0.79	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.56	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 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	0.68	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.65	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *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	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.62	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
AROCLOR 1254	0.79	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.89	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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
AROCLOR 1254	0.87	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.79	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	1.6	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1254	0.78	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.64	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
AROCLOR 1260	0.58	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
AROCLOR 1254	0.51	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** AQ

Sample ID: EB01-SA5B-120910 *Collected:* 12/9/2010 12:10:00 *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	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

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
DICAMBA	0.90	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

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
DICAMBA	0.57	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.88	U	0.88	MDL	2.7	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: EB01-SA5B-120910 *Collected:* 12/9/2010 12:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,6-DINITROTOLUENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2-NITROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L
2-NITROPHENOL	1	U	1	MDL	5	PQL	ug/L	UJ	L
3,3'-DICHLOROBENZIDINE	2	U	2	MDL	5	PQL	ug/L	UJ	L
4-NITROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	L
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E
CARBAZOLE	1	U	1	MDL	5	PQL	ug/L	UJ	L
DIBENZOFURAN	1	U	1	MDL	5	PQL	ug/L	UJ	L

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

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 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
BIS(2-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *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-CHLOROISOPROPYL) ETHER	20	U	20	MDL	200	PQL	ug/Kg	UJ	L

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	22	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:52:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-015-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 2:33:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	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: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *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-CHLOROISOPROPYL) ETHER	19	U	19	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *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-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	370	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BIS(2-CHLOROISOPROPYL) ETHER	18	U	18	MDL	180	PQL	ug/Kg	UJ	L

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

Sample ID: EB01-SA5B-120910 *Collected:* 12/9/2010 12:10:00 *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	0.22	J	0.051	MDL	1.0	PQL	ug/L	U	B
Butylbenzylphthalate	0.077	J	0.051	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.090	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.26	J	0.051	MDL	1.0	PQL	ug/L	U	B
Di-n-octylphthalate	0.075	J	0.051	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.032	J	0.010	MDL	0.051	PQL	ug/L	J	Z
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: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 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	0.96	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.76	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	0.83	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.76	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.84	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.1	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	7.3	MDL	22	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Di-n-butylphthalate	16	J	7.3	MDL	22	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.84	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.82	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *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(K)FLUORANTHENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(K)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	15	J	6.6	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	0.99	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 2:33:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.0	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.81	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.88	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.78	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 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
BENZO(A)ANTHRACENE	0.80	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *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	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.85	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.92	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	32		6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	8.8	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BENZO(G,H,I)PERYLENE	0.75	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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	0.80	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.87	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.7	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	6.7	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 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
BENZO(A)ANTHRACENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.2	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.85	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.71	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: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.63	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.7	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	19	J	6.6	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.5	J	6.6	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *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	16	J	6.9	MDL	21	PQL	ug/Kg	U	B

Sample ID: SL-029-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BENZO(A)PYRENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.94	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.2	J	6.6	MDL	20	PQL	ug/Kg	U	B
PHENANTHRENE	0.91	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-034-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 1:25:00 *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(A)PYRENE	0.98	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.3	J	6.6	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.88	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-035-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BENZO(B)FLUORANTHENE	1.4	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.3	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.5	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.90	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-036-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 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
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.93	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	6.6	MDL	20	PQL	ug/Kg	U	B
Butylbenzylphthalate	7.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.3	J	6.6	MDL	20	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8315A **Matrix:** AQ

Sample ID: EB14-SA5C-120810 *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
FORMALDEHYDE	12	J	10	MDL	50	PQL	ug/L	J	Z

Method Category: SVOA

Method: 8330A **Matrix:** AQ

Sample ID: EB14-SA5C-120810 *Collected:* 12/8/2010 12:00:00 *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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** AQ

Sample ID: EB14-SA5C-120810 *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
2,4-DIAMINO-6-NITROTOLUENE	0.20	U	0.20	MDL	0.60	PQL	ug/L	UJ	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	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	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:** AQ

Sample ID: EB14-SA5C-120810 *Collected:* 12/8/2010 12:00:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	520	J	200	MDL	1000	PQL	ug/L	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	310	J	110	MDL	560	PQL	ug/Kg	J	Z
METHANOL	130	J	110	MDL	560	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: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	330	J	120	MDL	610	PQL	ug/Kg	J	Z
METHANOL	140	J	120	MDL	610	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	260	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-013-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:52:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	260	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-012-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:05:00 *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	1.1	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-012-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:14:00 *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	2.3	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-013-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 1:44:00 *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	0.49	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: DE033 **Laboratory:** LL

EDD Filename: PrepDE033_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-013-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 1:52:00 *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	0.80	J	0.22	MDL	3.7	PQL	ug/Kg	U	B

Sample ID: SL-015-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 2:33:00 *Analysis Type:* RES *Dilution:* 0.8

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.44	J	0.11	MDL	3.5	PQL	ug/Kg	J	Z
TOLUENE	0.15	J	0.07	MDL	3.5	PQL	ug/Kg	U	B

Sample ID: SL-015-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 2:40:00 *Analysis Type:* RES *Dilution:* 1.03

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	2.2	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.17	J	0.09	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 4:10:00 *Analysis Type:* RES *Dilution:* 0.82

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.15	J	0.11	MDL	3.6	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	3.8		0.21	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.07	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-016-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 4:23:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	3.0	J	1.2	MDL	7.8	PQL	ug/Kg	J	Z
CHLOROFORM	0.16	J	0.12	MDL	3.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	5.5		0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.08	MDL	3.9	PQL	ug/Kg	U	B

Sample ID: SL-017-SA5B-SS-0.0-0.5 *Collected:* 12/8/2010 3:30:00 *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	0.59	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

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

Data Qualifier Summary

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-020-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 9:55:00 *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	2.6	J	0.21	MDL	3.6	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.07	MDL	3.6	PQL	ug/Kg	U	B

Sample ID: SL-020-SA5C-SB-7.5-8.5 *Collected:* 12/8/2010 10:00:00 *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	0.72	J	0.20	MDL	3.4	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.07	MDL	3.4	PQL	ug/Kg	U	B

Sample ID: SL-021-SA5C-SB-4.0-5.0 *Collected:* 12/8/2010 11:55:00 *Analysis Type:* RES *Dilution:* 0.83

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.11	J	0.11	MDL	3.5	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	4.5		0.21	MDL	3.5	PQL	ug/Kg	U	B
TOLUENE	0.1	J	0.07	MDL	3.5	PQL	ug/Kg	U	B

Sample ID: SL-021-SA5C-SB-9.0-10.0 *Collected:* 12/8/2010 12:00:00 *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	2.9	J	0.23	MDL	3.8	PQL	ug/Kg	U	B
TOLUENE	0.14	J	0.08	MDL	3.8	PQL	ug/Kg	U	B

Sample ID: SL-022-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 9:56:00 *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	0.68	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-022-SA5C-SB-9.0-10 *Collected:* 12/9/2010 10:02:00 *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	1.5	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: DE033 **Laboratory: LL**

EDD Filename: PrepDE033_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: DE033 **Laboratory: LL**

EDD Filename: PrepDE033_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: DE033 **Laboratory: LL**

EDD Filename: PrepDE033_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

DE033

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE033
EDD Filename: PrepDE033_v1

Laboratory: LL
eQAPP Name: CDM_SSFL_110509

Method: 9012B **Preparation Method: 3550B**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB14-SA5C-120810 (RES)	Sampling To Analysis	19.00	14.00	DAYS	J(all detects) UJ(all non-detects)

Method: 9040B **Preparation Method: 3550B**
Matrix: AQ

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB01-SA5B-120910 (RES)	Sampling To Analysis	154.00	48.00	HOURS	J(all detects) R(all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE033 | Laboratory: LL

EDD Filename: DE033_v1 | eQAPP Name: CDM_SSFL_110509

Method: 1625C
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWA34B261603	12/21/2010 4:03:00 PM	N-NITROSODIMETHYLAMINE	0.696 ng/L	EB14-SA5C-120810

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
EB14-SA5C-120810(RES)	N-NITROSODIMETHYLAMINE	1.57 ng/L	1.57U ng/L

Method: 314.0
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
B0356B271414A	12/27/2010 2:14:00 PM	PERCHLORATE	14.6 ug/Kg	SL-017-SA5B-SS-0.0-0.5 SL-021-SA5C-SB-4.0-5.0 SL-021-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-029-SA5B-SS-0.0-0.5(RES)	PERCHLORATE	30.9 ug/Kg	30.9U ug/Kg

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34908BB220421	12/16/2010 4:21:00 AM	PHOSPHORUS TIN	0.649 mg/Kg 1.42 mg/Kg	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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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(REA2)	TIN	1.79 mg/Kg	1.79U mg/Kg
SL-012-SA5C-SB-9.0-10.0(REA2)	TIN	2.13 mg/Kg	2.13U mg/Kg

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

Method Blank Outlier Report

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: DE033_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-013-SA5C-SB-4.0-5.0(REA2)	TIN	2.68 mg/Kg	2.68U mg/Kg
SL-013-SA5C-SB-9.0-10.0(REA2)	TIN	1.78 mg/Kg	1.78U mg/Kg
SL-015-SA5C-SB-4.0-5.0(REA2)	TIN	2.12 mg/Kg	2.12U mg/Kg
SL-015-SA5C-SB-9.0-10.0(REA2)	TIN	2.01 mg/Kg	2.01U mg/Kg
SL-016-SA5C-SB-4.0-5.0(REA2)	TIN	2.23 mg/Kg	2.23U mg/Kg
SL-016-SA5C-SB-9.0-10.0(REA2)	TIN	2.34 mg/Kg	2.34U mg/Kg
SL-017-SA5B-SS-0.0-0.5(REA2)	TIN	2.17 mg/Kg	2.17U mg/Kg
SL-020-SA5C-SB-4.0-5.0(REA2)	TIN	2.12 mg/Kg	2.12U mg/Kg
SL-020-SA5C-SB-7.5-8.5(REA2)	TIN	2.05 mg/Kg	2.05U mg/Kg
SL-021-SA5C-SB-4.0-5.0(REA2)	TIN	1.68 mg/Kg	1.68U mg/Kg
SL-021-SA5C-SB-9.0-10.0(REA2)	TIN	2.44 mg/Kg	2.44U mg/Kg
SL-022-SA5C-SB-4.0-5.0(REA2)	TIN	2.00 mg/Kg	2.00U mg/Kg
SL-022-SA5C-SB-9.0-10(REA2)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-029-SA5B-SS-0.0-0.5(REA2)	TIN	2.12 mg/Kg	2.12U mg/Kg
SL-034-SA5B-SS-0.0-0.5(REA2)	TIN	1.87 mg/Kg	1.87U mg/Kg
SL-035-SA5B-SS-0.0-0.5(REA2)	TIN	1.63 mg/Kg	1.63U mg/Kg
SL-036-SA5B-SS-0.0-0.5(REA2)	TIN	1.96 mg/Kg	1.96U mg/Kg

Method: 6020
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34750CB220020A	12/15/2010 12:20:00 AM	ZINC	0.0051 mg/L	EB01-SA5B-120910

Method Blank Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34926BB221455A	12/17/2010 2:55:00 PM	COPPER	0.334 mg/Kg	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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB15B210928A	12/14/2010 9:28:00 AM	METHYLENE CHLORIDE TOLUENE	1.0 ug/Kg 0.11 ug/Kg	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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-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-012-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.0U ug/Kg
SL-012-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.1 ug/Kg	4.0U ug/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.3 ug/Kg	4.5U ug/Kg
SL-012-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.12 ug/Kg	4.5U ug/Kg
SL-013-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.49 ug/Kg	3.8U ug/Kg
SL-013-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.80 ug/Kg	3.7U ug/Kg
SL-015-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	3.5U ug/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.2 ug/Kg	4.5U ug/Kg
SL-015-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.17 ug/Kg	4.5U ug/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.8 ug/Kg	3.8U ug/Kg
SL-016-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.13 ug/Kg	3.6U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_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-016-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	5.5 ug/Kg	5.5U ug/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.14 ug/Kg	3.9U ug/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	METHYLENE CHLORIDE	0.59 ug/Kg	4.0U ug/Kg
SL-017-SA5B-SS-0.0-0.5(RES)	TOLUENE	0.08 ug/Kg	4.0U ug/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.6 ug/Kg	3.6U ug/Kg
SL-020-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	3.6U ug/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	METHYLENE CHLORIDE	0.72 ug/Kg	3.4U ug/Kg
SL-020-SA5C-SB-7.5-8.5(RES)	TOLUENE	0.13 ug/Kg	3.4U ug/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	4.5 ug/Kg	4.5U ug/Kg
SL-021-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.1 ug/Kg	3.5U ug/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	2.9 ug/Kg	3.8U ug/Kg
SL-021-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.14 ug/Kg	3.8U ug/Kg
SL-022-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.68 ug/Kg	4.4U ug/Kg
SL-022-SA5C-SB-9.0-10(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	3.9U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI34B260739	12/15/2010 7:39:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Di-n-butylphthalate Di-n-octylphthalate	0.086 ug/L 0.074 ug/L 0.16 ug/L 0.076 ug/L	EB01-SA5B-120910

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)	BIS(2-ETHYLHEXYL)PHTHALATE	0.22 ug/L	1.0U ug/L
EB01-SA5B-120910(RES)	Butylbenzylphthalate	0.077 ug/L	1.0U ug/L
EB01-SA5B-120910(RES)	Di-n-butylphthalate	0.26 ug/L	1.0U ug/L
EB01-SA5B-120910(RES)	Di-n-octylphthalate	0.075 ug/L	1.0U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: DE033_v1 eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLF34B261204	12/20/2010 12:04:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	6.5 ug/Kg	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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	11 ug/Kg	22U ug/Kg
SL-016-SA5C-SB-9.0-10.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	32 ug/Kg	32U ug/Kg
SL-022-SA5C-SB-9.0-10(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	16 ug/Kg	21U ug/Kg
SL-029-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	8.2 ug/Kg	20U ug/Kg
SL-036-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	19 ug/Kg	20U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 | Laboratory: LL

EDD Filename: DE033_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
EB14-SA5C-120810MS EB14-SA5C-120810MSD (EB14-SA5C-120810)	ETHYLENE GLYCOL	85	80	89.00-125.00	-	ETHYLENE GLYCOL	J(all detects) UJ(all non-detects)

Method: 8015B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-022-SA5C-SB-9.0-10MSD (SL-022-SA5C-SB-9.0-10)	METHANOL	-	-	45.00-136.00	25 (20.00)	METHANOL	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-022-SA5C-SB-9.0-10MS SL-022-SA5C-SB-9.0-10MSD (SL-022-SA5C-SB-9.0-10)	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	18 57 50	27 62 52	59.00-109.00 63.00-107.00 63.00-107.00	40 (20.00) - -	DIETHYLENE GLYCOL ETHYLENE GLYCOL Propylene glycol	J(all detects) UJ(all non-detects)
SL-017-SA5B-SS-0.0-0.5MS SL-017-SA5B-SS-0.0-0.5MSD (SL-017-SA5B-SS-0.0-0.5)	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	0 -121 -222 -644 0	0 -2 895 1920 0	49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00 49.00-123.00	- 85 (20.00) 148 (20.00) 143 (20.00) -	EFH (C12-C14) EFH (C15-C20) EFH (C21-C30) EFH (C30-C40) EFH (C8-C11)	No Qual, No sample analysis associated

Method: 8151A
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)	DICAMBA	124	136	33.00-120.00	-	DICAMBA	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-017-SA5B-SS-0.0-0.5MS SL-017-SA5B-SS-0.0-0.5MSD (SL-017-SA5B-SS-0.0-0.5)	EFH (C21-C30) EFH (C30-C40)	-37 224	-208 -351	49.00-123.00 49.00-123.00	35 (20.00) 45 (20.00)	EFH (C21-C30) EFH (C30-C40)	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 | Laboratory: LL

EDD Filename: DE033_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-017-SA5B-SS-0.0-0.5MS SL-017-SA5B-SS-0.0-0.5MSD (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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	CADMIUM CHROMIUM LEAD NICKEL SILVER THALLIUM VANADIUM	127 128 - - 127 - -	149 152 127 129 139 144 149	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	- - - - - - -	CADMIUM CHROMIUM LEAD NICKEL SILVER THALLIUM VANADIUM	J(all detects)
SL-017-SA5B-SS-0.0-0.5MS SL-017-SA5B-SS-0.0-0.5MSD (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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	ANTIMONY ZINC	42 -154	21 -45	75.00-125.00 75.00-125.00	52 (20.00) -	ANTIMONY ZINC	J(all detects) R(all non-detects) Zn No Qual, >4x
SL-017-SA5B-SS-0.0-0.5MS (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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	ARSENIC	65	-	75.00-125.00	-	ARSENIC	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_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-017-SA5B-SS-0.0-0.5MSD (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	SELENIUM	-	135	75.00-125.00	37 (20.00)	SELENIUM	J(all detects) UJ(all non-detects)
SL-017-SA5B-SS-0.0-0.5MSD (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	MOLYBDENUM	-	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-017-SA5B-SS-0.0-0.5MS **SL-017-SA5B-SS-0.0-0.5MSD** (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	BARIUM	-19	464	75.00-125.00	38 (20.00)	BARIUM	J(all detects) UJ(all non-detects) No Qual %R, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 | Laboratory: LL

EDD Filename: DE033_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-017-SA5B-SS-0.0-0.5MS **SL-017-SA5B-SS-0.0-0.5MSD** (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	ALUMINUM	735	1377	75.00-125.00	-	ALUMINUM	No Qual, >4x
SL-017-SA5B-SS-0.0-0.5MS **SL-017-SA5B-SS-0.0-0.5MSD** (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	CALCIUM IRON MAGNESIUM MANGANESE	-122 -1091 -53 29	283 2293 288 66	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	33 (20.00) - - -	CALCIUM IRON MAGNESIUM MANGANESE	J(all detects) UJ(all non-detects) No Qual %R, >4x
SL-017-SA5B-SS-0.0-0.5MS (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	PHOSPHORUS POTASSIUM	40 71	- -	75.00-125.00 75.00-125.00	- -	PHOSPHORUS POTASSIUM	J(all detects) UJ(all non-detects) P No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_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-SS-0.0-0.5MSD (SL-017-SA5B-SS-0.0-0.5)	Di-n-octylphthalate	-	202	40.00-192.00	-	Di-n-octylphthalate	J(all detects)

Method: 6010B
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-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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	TITANIUM	327	294	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-029-SA5B-SS-0.0-0.5MS (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 -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	FLUORIDE	68	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-017-SA5B-SS-0.0-0.5DUP (SL-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0)	FLUORIDE	28	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-017-SA5B-SS-0.0-0.5DUP (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-015-SA5C-SB-4.0-5.0 SL-015-SA5C-SB-9.0-10.0 SL-016-SA5C-SB-4.0-5.0 SL-016-SA5C-SB-9.0-10.0 SL-017-SA5B-SS-0.0-0.5 SL-020-SA5C-SB-4.0-5.0 SL-020-SA5C-SB-7.5-8.5 SL-021-SA5C-SB-4.0-5.0 SL-021-SA5C-SB-9.0-10.0 SL-022-SA5C-SB-4.0-5.0 SL-022-SA5C-SB-9.0-10 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)	BORON	28	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-017-SA5B-SS-0.0-0.5DUP	ANTIMONY	50	20.00	
(SL-012-SA5C-SB-4.0-5.0	ARSENIC	32	20.00	
SL-012-SA5C-SB-9.0-10.0	BARIUM	26	20.00	
SL-013-SA5C-SB-4.0-5.0	BERYLLIUM	0.23	0.22 mg/Kg	
SL-013-SA5C-SB-9.0-10.0	CHROMIUM	26	20.00	
SL-015-SA5C-SB-4.0-5.0	COBALT	24	20.00	
SL-015-SA5C-SB-9.0-10.0	COPPER	28	20.00	
SL-016-SA5C-SB-4.0-5.0	LEAD	25	20.00	
SL-016-SA5C-SB-9.0-10.0	SILVER	58	20.00	
SL-017-SA5B-SS-0.0-0.5	THALLIUM	30	20.00	J(all detects)
SL-020-SA5C-SB-4.0-5.0	VANADIUM	29	20.00	UJ(all non-detects)
SL-020-SA5C-SB-7.5-8.5	ZINC	40	20.00	
SL-021-SA5C-SB-4.0-5.0				Sb, Ag, Tl No Qual
SL-021-SA5C-SB-9.0-10.0				OK by difference
SL-022-SA5C-SB-4.0-5.0				
SL-022-SA5C-SB-9.0-10				
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)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-017-SA5B-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	200	20.00	
(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-015-SA5C-SB-4.0-5.0				
SL-015-SA5C-SB-9.0-10.0				
SL-016-SA5C-SB-4.0-5.0				
SL-016-SA5C-SB-9.0-10.0				
SL-017-SA5B-SS-0.0-0.5				No Qual
SL-020-SA5C-SB-4.0-5.0				OK by difference
SL-020-SA5C-SB-7.5-8.5				
SL-021-SA5C-SB-4.0-5.0				
SL-021-SA5C-SB-9.0-10.0				
SL-022-SA5C-SB-4.0-5.0				
SL-022-SA5C-SB-9.0-10				
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)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: DE033_v1 eQAPP Name: CDM_SSFL_110509

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-017-SA5B-SS-0.0-0.5DUP (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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	MERCURY	48	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-029-SA5B-SS-0.0-0.5DUP (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 -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	FLUORIDE	2.9	2.2 mg/Kg	J(all detects) UJ(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: PrepDE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03489AY241833A (EB01-SA5B-120910)	DINOSEB	-	-	32.00-91.00	42 (30.00)	DINOSEB	J (all detects) UJ (all non-detects)

Method: 1625C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WALCSY261637 (EB14-SA5C-120810)	N-NITROSODIMETHYLAMINE	-	60	70.00-130.00	47 (30.00)	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
P7WELCSQ260519 P7WELCSY260545 (EB01-SA5B-120910)	2,6-DINITROTOLUENE	83	84	85.00-115.00	-	2,6-DINITROTOLUENE	J(all detects) UJ(all non-detects)
	2-NITROANILINE	76	80	83.00-116.00	-	2-NITROANILINE	
	2-NITROPHENOL	77	81	86.00-120.00	-	2-NITROPHENOL	
	3,3'-DICHLOROBENZIDINE	44	-	49.00-111.00	-	3,3'-DICHLOROBENZIDINE	
	4-NITROANILINE	58	-	59.00-100.00	-	4-NITROANILINE	
	BENZOIC ACID	-	-	10.00-69.00	39 (30.00)	BENZOIC ACID	
	CARBAZOLE	76	79	81.00-114.00	-	CARBAZOLE	
	DIBENZOFURAN	79	82	83.00-108.00	-	DIBENZOFURAN	

Method: 8270C SIM
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P7WILCSQ260813 P7WILCSY260850 (EB01-SA5B-120910)	N-NITROSODIMETHYLAMINE	67	68	70.00-130.00	-	N-NITROSODIMETHYLAMINE	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
P03494AQ242201A (SL-017-SA5B-SS-0.0-0.5 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)	DINOSEB	7	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: PrepDE033_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03501AQ241924A (SL-017-SA5B-SS-0.0-0.5 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)	4,4'-DDT METHOXYCHLOR	134 141	- -	54.00-130.00 59.00-125.00	- -	4,4'-DDT METHOXYCHLOR	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P8LGLCSQ260831 (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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	BIS(2-CHLOROISOPROPYL) ET	58	-	68.00-131.00	-	BIS(2-CHLOROISOPROPYL) E	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
P34926BQ221458A (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 -015-SA5C-SB-4.0-5.0 SL -015-SA5C-SB-9.0-10.0 SL -016-SA5C-SB-4.0-5.0 SL -016-SA5C-SB-9.0-10.0 SL -017-SA5B-SS-0.0-0.5 SL -020-SA5C-SB-4.0-5.0 SL -020-SA5C-SB-7.5-8.5 SL -021-SA5C-SB-4.0-5.0 SL -021-SA5C-SB-9.0-10.0 SL -022-SA5C-SB-4.0-5.0 SL -022-SA5C-SB-9.0-10 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)	ANTIMONY	61	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: DE033_v1 eQAPP Name: CDM_SSFL_110509

Method: 8015B
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-015-SA5C-SB-4.0-5.0	n-Triacontane-d62	192	50.00-150.00	All Target Analytes	J(all detects)
SL-015-SA5C-SB-9.0-10.0	n-Triacontane-d62	197	50.00-150.00	All Target Analytes	J(all detects)
SL-016-SA5C-SB-4.0-5.0	n-Triacontane-d62	195	50.00-150.00	All Target Analytes	J(all detects)

Method: 8015M
Matrix: AQ

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
TB-120810	TRIFLUOROTOLUENE (FID)	75	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
EB14-SA5C-120810	2-NITRO-M-XYLENE	63	75.00-120.00	All Target Analytes	J (all detects) UJ (all non-detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 Laboratory: LL

EDD Filename: DE033_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5B-120910	SILVER	J	0.00010	0.00050	PQL	mg/L	J (all detects)

Method: 8015B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB14-SA5C-120810	ETHANOL	J	520	1000	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SA5B-120910	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.22	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.077	1.0	PQL	ug/L	
	Diethylphthalate	J	0.090	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.26	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.075	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.032	0.051	PQL	ug/L	

Method: 8315A

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB14-SA5C-120810	FORMALDEHYDE	J	12	50	PQL	ug/L	J (all detects)

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	26.8	40.7	PQL	ng/Kg	J (all detects)
SL-015-SA5C-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	24.8	36.8	PQL	ng/Kg	J (all detects)
SL-015-SA5C-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	31.3	36.3	PQL	ng/Kg	J (all detects)
SL-016-SA5C-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	22.3	36.5	PQL	ng/Kg	J (all detects)
SL-017-SA5B-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	21.8	36.4	PQL	ng/Kg	J (all detects)
SL-021-SA5C-SB-4.0-5.0	N-NITROSODIMETHYLAMINE	J	22.9	35.6	PQL	ng/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.5	1.8	PQL	mg/Kg	J (all detects)
SL-013-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-015-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)
SL-020-SA5C-SB-7.5-8.5	Nitrate-NO3	J	1.5	1.6	PQL	mg/Kg	J (all detects)

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5C-SB-9.0-10.0	PERCHLORATE	J	12.2	33.0	PQL	ug/Kg	J (all detects)
SL-029-SA5B-SS-0.0-0.5	PERCHLORATE	J	30.9	32.8	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	BORON	J	2.63	5.29	PQL	mg/Kg	J (all detects)
	TIN	J	1.79	10.6	PQL	mg/Kg	
	Zirconium	J	1.98	5.29	PQL	mg/Kg	
SL-012-SA5C-SB-9.0-10.0	BORON	J	3.90	5.99	PQL	mg/Kg	J (all detects)
	TIN	J	2.13	12.0	PQL	mg/Kg	
	Zirconium	J	4.32	5.99	PQL	mg/Kg	
SL-013-SA5C-SB-4.0-5.0	BORON	J	2.86	5.27	PQL	mg/Kg	J (all detects)
	TIN	J	2.68	10.5	PQL	mg/Kg	
	Zirconium	J	1.48	5.27	PQL	mg/Kg	
SL-013-SA5C-SB-9.0-10.0	BORON	J	2.48	5.22	PQL	mg/Kg	J (all detects)
	TIN	J	1.78	10.4	PQL	mg/Kg	
	Zirconium	J	0.977	5.22	PQL	mg/Kg	
SL-015-SA5C-SB-4.0-5.0	BORON	J	2.53	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.12	10.6	PQL	mg/Kg	
	Zirconium	J	1.56	5.31	PQL	mg/Kg	
SL-015-SA5C-SB-9.0-10.0	BORON	J	2.75	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	2.01	10.7	PQL	mg/Kg	
	Zirconium	J	0.933	5.33	PQL	mg/Kg	
SL-016-SA5C-SB-4.0-5.0	BORON	J	2.34	5.43	PQL	mg/Kg	J (all detects)
	TIN	J	2.23	10.9	PQL	mg/Kg	
	Zirconium	J	1.58	5.43	PQL	mg/Kg	
SL-016-SA5C-SB-9.0-10.0	BORON	J	2.91	5.24	PQL	mg/Kg	J (all detects)
	TIN	J	2.34	10.5	PQL	mg/Kg	
	Zirconium	J	1.78	5.24	PQL	mg/Kg	
SL-017-SA5B-SS-0.0-0.5	BORON	J	4.05	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	105	106	PQL	mg/Kg	
	TIN	J	2.17	10.6	PQL	mg/Kg	
	Zirconium	J	2.61	5.31	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-020-SA5C-SB-4.0-5.0	BORON	J	2.16	5.51	PQL	mg/Kg	J (all detects)
	SODIUM	J	100	110	PQL	mg/Kg	
	TIN	J	2.12	11.0	PQL	mg/Kg	
	Zirconium	J	1.94	5.51	PQL	mg/Kg	
SL-020-SA5C-SB-7.5-8.5	BORON	J	2.73	5.37	PQL	mg/Kg	J (all detects)
	TIN	J	2.05	10.7	PQL	mg/Kg	
	Zirconium	J	1.52	5.37	PQL	mg/Kg	
SL-021-SA5C-SB-4.0-5.0	BORON	J	2.16	5.19	PQL	mg/Kg	J (all detects)
	TIN	J	1.68	10.4	PQL	mg/Kg	
	Zirconium	J	1.05	5.19	PQL	mg/Kg	
SL-021-SA5C-SB-9.0-10.0	BORON	J	2.17	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.44	10.6	PQL	mg/Kg	
	Zirconium	J	1.71	5.31	PQL	mg/Kg	
SL-022-SA5C-SB-4.0-5.0	BORON	J	1.80	5.38	PQL	mg/Kg	J (all detects)
	TIN	J	2.00	10.8	PQL	mg/Kg	
	Zirconium	J	2.37	5.38	PQL	mg/Kg	
SL-022-SA5C-SB-9.0-10	BORON	J	2.02	5.57	PQL	mg/Kg	J (all detects)
	TIN	J	2.49	11.1	PQL	mg/Kg	
	Zirconium	J	2.42	5.57	PQL	mg/Kg	
SL-029-SA5B-SS-0.0-0.5	BORON	J	3.84	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.12	10.6	PQL	mg/Kg	
	Zirconium	J	2.75	5.31	PQL	mg/Kg	
SL-034-SA5B-SS-0.0-0.5	BORON	J	3.87	5.20	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.1	104	PQL	mg/Kg	
	TIN	J	1.87	10.4	PQL	mg/Kg	
	Zirconium	J	1.98	5.20	PQL	mg/Kg	
SL-035-SA5B-SS-0.0-0.5	BORON	J	3.94	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	105	109	PQL	mg/Kg	
	TIN	J	1.63	10.9	PQL	mg/Kg	
	Zirconium	J	4.03	5.43	PQL	mg/Kg	
SL-036-SA5B-SS-0.0-0.5	BORON	J	3.38	5.42	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.6	108	PQL	mg/Kg	
	TIN	J	1.96	10.8	PQL	mg/Kg	
	Zirconium	J	2.09	5.42	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	ANTIMONY	J	0.102	0.212	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.104	0.106	PQL	mg/Kg	
	SELENIUM	J	0.215	0.423	PQL	mg/Kg	
	SILVER	J	0.0279	0.106	PQL	mg/Kg	
SL-012-SA5C-SB-9.0-10.0	ANTIMONY	J	0.134	0.244	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0888	0.489	PQL	mg/Kg	
	SILVER	J	0.0168	0.122	PQL	mg/Kg	
SL-013-SA5C-SB-4.0-5.0	ANTIMONY	J	0.114	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.204	0.434	PQL	mg/Kg	
	SILVER	J	0.0413	0.109	PQL	mg/Kg	
SL-013-SA5C-SB-9.0-10.0	SELENIUM	J	0.116	0.439	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0312	0.110	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0688	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.256	0.438	PQL	mg/Kg	
	SILVER	J	0.0235	0.109	PQL	mg/Kg	
SL-015-SA5C-SB-9.0-10.0	SELENIUM	J	0.115	0.427	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0229	0.107	PQL	mg/Kg	
SL-016-SA5C-SB-4.0-5.0	CADMIUM	J	0.0751	0.105	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.124	0.422	PQL	mg/Kg	
	SILVER	J	0.0261	0.105	PQL	mg/Kg	
SL-016-SA5C-SB-9.0-10.0	ANTIMONY	J	0.0952	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.170	0.431	PQL	mg/Kg	
	SILVER	J	0.0334	0.108	PQL	mg/Kg	
SL-017-SA5B-SS-0.0-0.5	ANTIMONY	J	0.140	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.190	0.433	PQL	mg/Kg	
	SILVER	J	0.0385	0.108	PQL	mg/Kg	
SL-020-SA5C-SB-4.0-5.0	SELENIUM	J	0.0983	0.428	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0350	0.107	PQL	mg/Kg	
SL-020-SA5C-SB-7.5-8.5	ANTIMONY	J	0.0882	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0615	0.417	PQL	mg/Kg	
	SILVER	J	0.0607	0.104	PQL	mg/Kg	
SL-021-SA5C-SB-4.0-5.0	SELENIUM	J	0.116	0.415	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0297	0.104	PQL	mg/Kg	
SL-021-SA5C-SB-9.0-10.0	ANTIMONY	J	0.0986	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.115	0.429	PQL	mg/Kg	
	SILVER	J	0.0462	0.107	PQL	mg/Kg	
SL-022-SA5C-SB-4.0-5.0	SELENIUM	J	0.0902	0.435	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0448	0.109	PQL	mg/Kg	
SL-022-SA5C-SB-9.0-10	SELENIUM	J	0.116	0.450	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0425	0.113	PQL	mg/Kg	
SL-029-SA5B-SS-0.0-0.5	ANTIMONY	J	0.112	0.208	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0278	0.104	PQL	mg/Kg	
SL-034-SA5B-SS-0.0-0.5	ANTIMONY	J	0.138	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.229	0.424	PQL	mg/Kg	
	SILVER	J	0.0315	0.106	PQL	mg/Kg	
SL-035-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0787	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.174	0.426	PQL	mg/Kg	
	SILVER	J	0.0195	0.107	PQL	mg/Kg	
SL-036-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0978	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.421	PQL	mg/Kg	
	SILVER	J	0.0308	0.105	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-015-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-022-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.37	1.1	PQL	mg/Kg	J (all detects)
SL-035-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-036-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5C-SB-4.0-5.0	MERCURY	J	0.0048	0.107	PQL	mg/Kg	J (all detects)
SL-017-SA5B-SS-0.0-0.5	MERCURY	J	0.0072	0.107	PQL	mg/Kg	J (all detects)
SL-021-SA5C-SB-4.0-5.0	MERCURY	J	0.0073	0.0998	PQL	mg/Kg	J (all detects)
SL-021-SA5C-SB-9.0-10.0	MERCURY	J	0.0070	0.102	PQL	mg/Kg	J (all detects)
SL-029-SA5B-SS-0.0-0.5	MERCURY	J	0.0041	0.101	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	ETHANOL METHANOL	J J	310 130	560 560	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-012-SA5C-SB-9.0-10.0	ETHANOL METHANOL	J J	330 140	610 610	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-013-SA5C-SB-4.0-5.0	ETHANOL	J	260	550	PQL	ug/Kg	J (all detects)
SL-013-SA5C-SB-9.0-10.0	ETHANOL	J	260	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5C-SB-4.0-5.0	EFH (C15-C20)	J	0.48	1.3	PQL	mg/Kg	J (all detects)
SL-016-SA5C-SB-4.0-5.0	EFH (C15-C20)	J	0.53	1.3	PQL	mg/Kg	J (all detects)
SL-016-SA5C-SB-9.0-10.0	EFH (C15-C20)	J	5.8	6.6	PQL	mg/Kg	J (all detects)
SL-020-SA5C-SB-4.0-5.0	EFH (C21-C30)	J	1.2	1.3	PQL	mg/Kg	J (all detects)
SL-020-SA5C-SB-7.5-8.5	EFH (C30-C40)	J	1.1	1.3	PQL	mg/Kg	J (all detects)
SL-021-SA5C-SB-4.0-5.0	EFH (C15-C20)	J	0.48	1.3	PQL	mg/Kg	J (all detects)
SL-021-SA5C-SB-9.0-10.0	EFH (C15-C20)	J	0.63	1.3	PQL	mg/Kg	J (all detects)
SL-022-SA5C-SB-4.0-5.0	EFH (C21-C30) EFH (C30-C40)	J J	0.66 0.75	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-022-SA5C-SB-9.0-10	EFH (C21-C30)	J	0.48	1.4	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-029-SA5B-SS-0.0-0.5	BETA-BHC	J	0.071	0.18	PQL	ug/Kg	J (all detects)
SL-034-SA5B-SS-0.0-0.5	4,4'-DDT MIREX	J J	0.13 0.10	0.37 0.37	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	AROCLOR 1260	J	0.75	1.9	PQL	ug/Kg	J (all detects)
SL-012-SA5C-SB-9.0-10.0	AROCLOR 1254 AROCLOR 1260	J J	1.1 0.81	2.1 2.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-013-SA5C-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	1.2 0.76	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-013-SA5C-SB-9.0-10.0	AROCLOR 1254 AROCLOR 1260	J J	0.79 0.56	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-015-SA5C-SB-9.0-10.0	AROCLOR 1254 AROCLOR 1260	J J	0.68 0.65	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-016-SA5C-SB-9.0-10.0	AROCLOR 1254 AROCLOR 1260	J J	1.6 0.62	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-017-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	0.79 0.89	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-021-SA5C-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	0.87 0.79	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-021-SA5C-SB-9.0-10.0	AROCLOR 1248 AROCLOR 1254 AROCLOR 1260	J J J	1.6 0.78 0.64	1.9 1.9 1.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-035-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.58	1.9	PQL	ug/Kg	J (all detects)
SL-036-SA5B-SS-0.0-0.5	AROCLOR 1254	J	0.51	1.9	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-034-SA5B-SS-0.0-0.5	DICAMBA	J	0.90	1.3	PQL	ug/Kg	J (all detects)
SL-036-SA5B-SS-0.0-0.5	DICAMBA	J	0.57	1.3	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.1	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-012-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	2.3 0.12	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-013-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.49	3.8	PQL	ug/Kg	J (all detects)
SL-013-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.80	3.7	PQL	ug/Kg	J (all detects)
SL-015-SA5C-SB-4.0-5.0	CHLOROFORM TOLUENE	J J	0.44 0.15	3.5 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-015-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	2.2 0.17	4.5 4.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-016-SA5C-SB-4.0-5.0	CHLOROFORM TOLUENE	J J	0.15 0.13	3.6 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-016-SA5C-SB-9.0-10.0	2-BUTANONE (MEK)	J	3.0	7.8	PQL	ug/Kg	J (all detects)
	CHLOROFORM	J	0.16	3.9	PQL	ug/Kg	
	TOLUENE	J	0.14	3.9	PQL	ug/Kg	
SL-017-SA5B-SS-0.0-0.5	METHYLENE CHLORIDE	J	0.59	4.0	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	4.0	PQL	ug/Kg	
SL-020-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	2.6	3.6	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.15	3.6	PQL	ug/Kg	
SL-020-SA5C-SB-7.5-8.5	METHYLENE CHLORIDE	J	0.72	3.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.13	3.4	PQL	ug/Kg	
SL-021-SA5C-SB-4.0-5.0	CHLOROFORM	J	0.11	3.5	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.1	3.5	PQL	ug/Kg	
SL-021-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	2.9	3.8	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.14	3.8	PQL	ug/Kg	
SL-022-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.68	4.4	PQL	ug/Kg	J (all detects)
SL-022-SA5C-SB-9.0-10	METHYLENE CHLORIDE	J	1.5	3.9	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-013-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	370	PQL	ug/Kg	J (all detects)
SL-015-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	360	PQL	ug/Kg	J (all detects)
SL-016-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-017-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-034-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	360	PQL	ug/Kg	J (all detects)
SL-035-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-012-SA5C-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.76	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	0.83	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.76	1.9	PQL	ug/Kg	
	PYRENE	J	0.84	1.9	PQL	ug/Kg	
SL-012-SA5C-SB-9.0-10.0	BENZO(G,H,I)PERYLENE	J	1.1	2.0	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	22	PQL	ug/Kg	
	Di-n-butylphthalate	J	16	22	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.84	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	2.0	PQL	ug/Kg	
SL-013-SA5C-SB-4.0-5.0	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-013-SA5C-SB-9.0-10.0	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	15	20	PQL	ug/Kg	
	PHENANTHRENE	J	0.99	1.8	PQL	ug/Kg	
SL-015-SA5C-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.81	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.88	1.8	PQL	ug/Kg	
	PYRENE	J	0.78	1.8	PQL	ug/Kg	
SL-015-SA5C-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	0.80	1.8	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.8	PQL	ug/Kg	
SL-016-SA5C-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.85	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.92	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	20	PQL	ug/Kg	
SL-017-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	0.75	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-020-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.87	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	10	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-021-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	19	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.2	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.85	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
SL-021-SA5C-SB-9.0-10.0	ACENAPHTHYLENE	J	0.63	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	19	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.9	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.5	20	PQL	ug/Kg	
	FLUORENE	J	1.0	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.8	PQL	ug/Kg	
SL-022-SA5C-SB-9.0-10	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	21	PQL	ug/Kg	J (all detects)
SL-029-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.94	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.2	20	PQL	ug/Kg	
	PHENANTHRENE	J	0.91	1.8	PQL	ug/Kg	
SL-034-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	0.98	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.3	20	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.88	1.8	PQL	ug/Kg	
	PYRENE	J	1.6	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE033 **Laboratory: LL**

EDD Filename: DE033_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-035-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.3	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.5	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.90	1.8	PQL	ug/Kg	
	PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-036-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.93	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.9	20	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.3	20	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	

LDC #: 25337E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-4-11
SDG #: DE033 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, K, Ti, Zn >4X) RPDs
VII.	Duplicate Sample Analysis	N	Dup (Sb, B, Hg, Ag, Tl <5x RL). Be <5x RL Difference
VIII.	Laboratory Control Samples (LCS)	N	T/W/A
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (Cr, Co, Cu, Ni, Zn)
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
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	SL-017-SA5B-SS-0.0-0.5DUP	33	
4	SL-020-SA5C-SB-7.5-8.5	14	SL-036-SA5B-SS-0.0-0.5	24		34	
5	SL-016-SA5C-SB-4.0-5.0	15	SL-022-SA5C-SB-4.0-5.0	25		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	EB-01-SA5B-120910 W	20	SL-013-SA5C-SB-9.0-10.0	30		40	

Notes:

LDC #: 25337E4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: A

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x x (ICPMS: 2xdil)

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil

			Sample Identification																
Analyte	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	1	4	6	8	9	11	12	13	14	17	18	19					
Sb	0.33	0.33	0.069	0.088	0.095	0.099	0.14	0.11	0.14	0.079	0.098	0.10	0.13	0.11					

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water

					Sample Identification									
Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	10									
Ag			0.16	0.8	0.10									

LDC #: 25337E4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: OR
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: 12/9/10 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: 15-20

Analyte	Blank ID	Sample Identification										
	8	Action Level	No Qualifiers (>5x)									
Ag	0.10	0.05										

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.: DE033
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6162864BKG Serial Dilution Lab Sample ID: 6162864L
Batch ID(s): P34908B, P34926B, P35008C
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		125675.2800		128924.3500		3		P
Antimony	121	0.6459	B	1.5000	U	100		MS
Arsenic	75	27.6900		26.7350		3		MS
Barium	137	505.1000		524.5000		4		MS
Beryllium	9	3.0580		2.8885		6		MS
Boron		38.1400	B	79.8500	B	109		P
Cadmium	111	0.5414		0.9000	U	100		MS
Calcium		46602.0400		47171.4500		1		P
Chromium	52	111.6000		125.9000		13	E	MS
Cobalt	59	30.0600		36.4600		21	E	MS
Copper	63	50.8800		58.9000		16	E	MS
Iron		174018.7800		168903.5500		3		P
Lead	208	33.2700		35.1550		6		MS
Lithium		167.8600		171.0500		2		P
Magnesium		38610.4700		39091.1000		1		P
Manganese		2204.5100		2274.5500		3		P
Molybdenum	98	5.7400		4.8900		15		MS
Nickel	60	61.2200		74.9000		22	E	MS
Phosphorus		4197.5700		4335.5500		3		P
Potassium		27047.8200		26919.7000		0		P
Selenium	78	0.8797	B	1.7040	B	94		MS
Silver	107	0.1781	B	0.3457	B	94		MS
Sodium		992.3500	B	1865.0000	U	100		P
Strontium		260.9500		259.3000		1		P
Thallium	203	1.3100		1.4165	B	8		MS
Tin		20.4300	B	50.0000	U	100		P
Titanium		4895.5600		4753.6000		3		P
Vanadium	51	192.3000		208.2000		8		MS
Zinc	66	401.2000		477.6000		19	E	MS
Zirconium		24.5900	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

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	6162903	N	3050B	6010B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3050B	6020	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3060A	7199	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3546	1625C	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3550B	8015B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3550B	8015M	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3550B	8082	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3550B	8270C	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	3550B	8270C SIM	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	5035	8015M	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	5035	8260B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	5035	8260B SIM	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	8330	8330A	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	Gen Prep	9045M	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	300.0	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	314.0	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	7471A	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	8015B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	8015M	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	8315A	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0	6162903	N	METHOD	9012B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0DUP	P162903D221938	DUP	3050B	6010B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MSD	P162903M221946	MSD	3050B	6010B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MSD	P162903M240932A	MSD	3550B	8082	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MSD	P162903M260707	MSD	3550B	8270C SIM	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MSD	P162903M261352	MSD	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
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MS	P162903R221942	MS	3050B	6010B	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MS	P162903R240913A	MS	3550B	8082	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MS	P162903R260633	MS	3550B	8270C SIM	III
09-Dec-2010	SL-017-SA5C-SB-4.0-5.0MS	P162903R261326	MS	3550B	8270C	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3050B	6010B	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3050B	6020	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3060A	7199	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3546	1625C	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3550B	8015B	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3550B	8015M	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3550B	8082	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3550B	8270C	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	3550B	8270C SIM	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	5035	8015M	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	5035	8260B	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	5035	8260B SIM	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	8330	8330A	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	Gen Prep	9045M	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	300.0	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	314.0	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	7471A	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	8015B	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	8015M	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	8315A	III
09-Dec-2010	SL-017-SA5C-SB-9.0-10.0	6162904	N	METHOD	9012B	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	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-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3060A	7199	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3550B	8081A	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3550B	8082	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3550B	8151A	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3550B	8270C	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	3550B	8270C SIM	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	Gen Prep	9045M	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	METHOD	300.0	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	METHOD	314.0	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5	6162905	N	METHOD	7471A	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D220512	DUP	METHOD	7471A	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D220628A	DUP	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D221441A	DUP	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D221441B	DUP	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D221441C	DUP	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D221441D	DUP	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5DUP	P162905D222305	DUP	3050B	6010B	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M220517	MSD	METHOD	7471A	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M220631A	MSD	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M221447A	MSD	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M221447B	MSD	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M221447C	MSD	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M221447D	MSD	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M222312	MSD	3050B	6010B	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MSD	P162905M240427A	MSD	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-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R220516	MS	METHOD	7471A	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R220629A	MS	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R221444A	MS	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R221444B	MS	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R221444C	MS	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R221444D	MS	3050B	6020	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R222308	MS	3050B	6010B	III
10-Dec-2010	SL-008-SA5B-SS-0.0-0.5MS	P162905R240359A	MS	3550B	8151A	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3050B	6010B	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3050B	6020	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3060A	7199	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3550B	8081A	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3550B	8082	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3550B	8151A	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3550B	8270C	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	3550B	8270C SIM	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	Gen Prep	9045M	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	METHOD	300.0	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	METHOD	314.0	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5	6162906	N	METHOD	7471A	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5DUP	P162906D270752A	DUP	METHOD	314.0	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5DUP	P162906D291045B	DUP	Gen Prep	9045M	III
10-Dec-2010	SL-009-SA5B-SS-0.0-0.5MS	P162906R272215A	MS	METHOD	314.0	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3050B	6010B	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3050B	6020	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	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-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3550B	8081A	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3550B	8082	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3550B	8151A	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3550B	8270C	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	3550B	8270C SIM	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	Gen Prep	9045M	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	METHOD	300.0	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	METHOD	314.0	III
10-Dec-2010	SL-229-SA5B-SS-0.0-0.5	6162908	N	METHOD	7471A	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3050B	6010B	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3050B	6020	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3060A	7199	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3550B	8081A	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3550B	8082	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3550B	8151A	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3550B	8270C	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	3550B	8270C SIM	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	Gen Prep	9045M	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	METHOD	300.0	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	METHOD	314.0	III
10-Dec-2010	SL-048-SA5B-SS-0.0-0.5	6162909	N	METHOD	7471A	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3050B	6010B	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3050B	6020	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3060A	7199	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3550B	8081A	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	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
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3550B	8151A	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3550B	8270C	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	3550B	8270C SIM	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	Gen Prep	9045M	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	METHOD	300.0	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	METHOD	314.0	III
10-Dec-2010	SL-228-SA5B-SS-0.0-0.5	6162907	N	METHOD	7471A	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3050B	6010B	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3050B	6020	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3060A	7199	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3550B	8081A	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3550B	8082	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3550B	8151A	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3550B	8270C	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	3550B	8270C SIM	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	Gen Prep	9045M	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	METHOD	300.0	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	METHOD	314.0	III
10-Dec-2010	SL-299-SA5B-SS-0.0-0.5	6162915	N	METHOD	7471A	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3050B	6010B	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3050B	6020	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3060A	7199	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3550B	8081A	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3550B	8082	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3550B	8151A	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	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-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	3550B	8270C SIM	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	Gen Prep	9045M	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	METHOD	300.0	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	METHOD	314.0	III
10-Dec-2010	SL-300-SA5B-SS-0.0-0.5	6162916	N	METHOD	7471A	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3050B	6010B	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3050B	6020	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3060A	7199	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3550B	8081A	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3550B	8082	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3550B	8151A	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3550B	8270C	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	3550B	8270C SIM	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	Gen Prep	9045M	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	METHOD	300.0	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	METHOD	314.0	III
10-Dec-2010	SL-233-SA5B-SS-0.0-0.5	6162914	N	METHOD	7471A	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3050B	6010B	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3050B	6020	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3060A	7199	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3550B	8081A	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3550B	8082	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3550B	8151A	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3550B	8270C	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	3550B	8270C SIM	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	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
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	METHOD	300.0	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	METHOD	314.0	III
10-Dec-2010	SL-232-SA5B-SS-0.0-0.5	6162913	N	METHOD	7471A	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3050B	6010B	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3050B	6020	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3060A	7199	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3550B	8081A	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3550B	8082	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3550B	8151A	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3550B	8270C	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	3550B	8270C SIM	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	Gen Prep	9045M	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	METHOD	300.0	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	METHOD	314.0	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5	6162911	N	METHOD	7471A	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5DUP	P162911D271209A	DUP	METHOD	300.0	III
10-Dec-2010	SL-062-SA5B-SS-0.0-0.5MS	P162911R271252A	MS	METHOD	300.0	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3050B	6010B	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3050B	6020	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3060A	7199	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3550B	8081A	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3550B	8082	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3550B	8151A	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3550B	8270C	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	3550B	8270C SIM	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	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
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	METHOD	300.0	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	METHOD	314.0	III
10-Dec-2010	SL-064-SA5B-SS-0.0-0.5	6162912	N	METHOD	7471A	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3050B	6010B	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3050B	6020	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3060A	7199	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3550B	8081A	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3550B	8082	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3550B	8151A	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3550B	8270C	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	3550B	8270C SIM	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	Gen Prep	9045M	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	METHOD	300.0	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	METHOD	314.0	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5	6162910	N	METHOD	7471A	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5DUP	P162910D272018A	DUP	3060A	7199	III
10-Dec-2010	SL-051-SA5B-SS-0.0-0.5MS	P162910R271930A	MS	3060A	7199	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3050B	6010B	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3050B	6020	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3060A	7199	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3550B	8081A	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3550B	8082	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3550B	8151A	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3550B	8270C	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	3550B	8270C SIM	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	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
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	METHOD	300.0	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	METHOD	314.0	III
10-Dec-2010	SL-070-SA5B-SS-0.0-0.5	6162921	N	METHOD	7471A	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3050B	6010B	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3050B	6020	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3060A	7199	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3550B	8081A	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3550B	8082	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3550B	8151A	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3550B	8270C	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	3550B	8270C SIM	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	Gen Prep	9045M	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	METHOD	300.0	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	METHOD	314.0	III
10-Dec-2010	SL-061-SA5B-SS-0.0-0.5	6162920	N	METHOD	7471A	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3050B	6010B	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3050B	6020	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3060A	7199	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3550B	8081A	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3550B	8082	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3550B	8151A	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3550B	8270C	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	3550B	8270C SIM	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	Gen Prep	9045M	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	METHOD	300.0	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	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
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5	6162917	N	METHOD	7471A	III
10-Dec-2010	SL-067-SA5B-SS-0.0-0.5DUP	P162917D291300A	DUP	Gen Prep	9045M	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3050B	6010B	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3050B	6020	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3060A	7199	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3550B	8081A	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3550B	8082	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3550B	8151A	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3550B	8270C	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	3550B	8270C SIM	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	Gen Prep	9045M	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	METHOD	300.0	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	METHOD	314.0	III
10-Dec-2010	SL-059-SA5B-SS-0.0-0.5	6162918	N	METHOD	7471A	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3050B	6010B	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3050B	6020	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3060A	7199	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3550B	8081A	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3550B	8082	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3550B	8151A	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3550B	8270C	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	3550B	8270C SIM	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	Gen Prep	9045M	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	METHOD	300.0	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	N	METHOD	314.0	III
10-Dec-2010	SL-065-SA5B-SS-0.0-0.5	6162919	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

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
FLUORIDE	0.95	J	0.86	MDL	1.1	PQL	mg/Kg	J	Z

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
Nitrate-NO3	0.96	J	0.89	MDL	1.7	PQL	mg/Kg	J	Z

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
FLUORIDE	0.98	J	0.90	MDL	1.1	PQL	mg/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
FLUORIDE	4.2		0.92	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	3.9		0.92	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	3.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q

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
FLUORIDE	3.9		0.90	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	3.5		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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **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
FLUORIDE	0.86	U	0.86	MDL	1.1	PQL	mg/Kg	UJ	Q

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
FLUORIDE	1.8		0.92	MDL	1.2	PQL	mg/Kg	J	Q

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
FLUORIDE	3.9		0.91	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	3.3		0.93	MDL	1.2	PQL	mg/Kg	J	Q

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
FLUORIDE	4.0		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

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
PERCHLORATE	21.3	J	9.6	MDL	32.1	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **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
CALCIUM	41500		6.23	MDL	20.3	PQL	mg/Kg	J	E, E
POTASSIUM	2290		18.3	MDL	50.8	PQL	mg/Kg	J	Q
STRONTIUM	270		0.0630	MDL	0.508	PQL	mg/Kg	J	E, E, Q
TIN	1.59	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.35	J	0.853	MDL	5.08	PQL	mg/Kg	J	Z

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
CALCIUM	7540		6.43	MDL	21.0	PQL	mg/Kg	J	E, E
POTASSIUM	2450		18.9	MDL	52.5	PQL	mg/Kg	J	Q
STRONTIUM	33.1		0.0651	MDL	0.525	PQL	mg/Kg	J	E, E, Q
TIN	1.92	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.882	MDL	5.25	PQL	mg/Kg	J	Z

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
CALCIUM	2160		6.60	MDL	21.5	PQL	mg/Kg	J	E, E
POTASSIUM	2340		19.4	MDL	53.8	PQL	mg/Kg	J	Q
SODIUM	105	J	40.1	MDL	108	PQL	mg/Kg	J	Z
STRONTIUM	19.0		0.0667	MDL	0.538	PQL	mg/Kg	J	E, E, Q
TIN	1.77	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.11	J	0.904	MDL	5.38	PQL	mg/Kg	J	Z

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
CALCIUM	1780		6.66	MDL	21.7	PQL	mg/Kg	J	E, E
POTASSIUM	1700		19.5	MDL	54.3	PQL	mg/Kg	J	Q
STRONTIUM	18.0		0.0673	MDL	0.543	PQL	mg/Kg	J	E, E, Q
TIN	2.56	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.55	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
CALCIUM	2620		6.71	MDL	21.9	PQL	mg/Kg	J	E, E
POTASSIUM	4830		19.7	MDL	54.7	PQL	mg/Kg	J	Q
SODIUM	80.4	J	40.8	MDL	109	PQL	mg/Kg	J	Z
STRONTIUM	13.7		0.0679	MDL	0.547	PQL	mg/Kg	J	E, E, Q
TIN	3.11	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

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
CALCIUM	23000		6.80	MDL	22.2	PQL	mg/Kg	J	E, E
POTASSIUM	3810		20.0	MDL	55.5	PQL	mg/Kg	J	Q
STRONTIUM	50.0		0.0688	MDL	0.555	PQL	mg/Kg	J	E, E, Q
TIN	2.10	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.28	J	0.932	MDL	5.55	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:24:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	76000		35.2	MDL	115	PQL	mg/Kg	J	E, E

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
POTASSIUM	4540		20.7	MDL	57.4	PQL	mg/Kg	J	Q
STRONTIUM	136		0.0712	MDL	0.574	PQL	mg/Kg	J	E, E, Q
TIN	1.35	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.57	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

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
CALCIUM	42700		6.82	MDL	22.2	PQL	mg/Kg	J	E, E
POTASSIUM	4240		20.0	MDL	55.6	PQL	mg/Kg	J	Q
STRONTIUM	89.5		0.0690	MDL	0.556	PQL	mg/Kg	J	E, E, Q
TIN	2.04	J	1.11	MDL	11.1	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **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
Zirconium	3.33	J	0.934	MDL	5.56	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:00:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	68400		34.4	MDL	112	PQL	mg/Kg	J	E, E

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
POTASSIUM	5630		20.2	MDL	56.2	PQL	mg/Kg	J	Q
STRONTIUM	112		0.0696	MDL	0.562	PQL	mg/Kg	J	E, E, Q
TIN	1.51	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	2.72	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z

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
CALCIUM	20300		6.60	MDL	21.5	PQL	mg/Kg	J	E, E
POTASSIUM	5080		19.4	MDL	53.8	PQL	mg/Kg	J	Q
STRONTIUM	43.0		0.0668	MDL	0.538	PQL	mg/Kg	J	E, E, Q
TIN	1.79	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.11	J	0.904	MDL	5.38	PQL	mg/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
CALCIUM	44500		6.70	MDL	21.9	PQL	mg/Kg	J	E, E
POTASSIUM	4160		19.7	MDL	54.6	PQL	mg/Kg	J	Q
STRONTIUM	88.2		0.0678	MDL	0.546	PQL	mg/Kg	J	E, E, Q
TIN	2.08	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.10	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **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
CALCIUM	17800		6.54	MDL	21.3	PQL	mg/Kg	J	E, E
POTASSIUM	2410		19.2	MDL	53.3	PQL	mg/Kg	J	Q
STRONTIUM	39.5		0.0661	MDL	0.533	PQL	mg/Kg	J	E, E, Q
TIN	1.39	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.83	J	0.896	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-070-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:34:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	72300		35.7	MDL	117	PQL	mg/Kg	J	E, E

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
POTASSIUM	4450		21.0	MDL	58.3	PQL	mg/Kg	J	Q
STRONTIUM	126		0.0723	MDL	0.583	PQL	mg/Kg	J	E, E, Q
TIN	1.26	J	1.17	MDL	11.7	PQL	mg/Kg	U	B
Zirconium	3.14	J	0.980	MDL	5.83	PQL	mg/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
CALCIUM	4930		8.29	MDL	27.0	PQL	mg/Kg	J	E, E
POTASSIUM	2620		24.3	MDL	67.6	PQL	mg/Kg	J	Q
SODIUM	72.1	J	50.4	MDL	135	PQL	mg/Kg	J	Z
STRONTIUM	13.4		0.0838	MDL	0.676	PQL	mg/Kg	J	E, E, Q
TIN	1.91	J	1.35	MDL	13.5	PQL	mg/Kg	U	B
Zirconium	1.27	J	1.14	MDL	6.76	PQL	mg/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
CALCIUM	4140		6.91	MDL	22.6	PQL	mg/Kg	J	E, E
POTASSIUM	2520		20.3	MDL	56.4	PQL	mg/Kg	J	Q
STRONTIUM	30.3		0.0699	MDL	0.564	PQL	mg/Kg	J	E, E, 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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
TIN	1.59	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	2.55	J	0.947	MDL	5.64	PQL	mg/Kg	J	Z

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
CALCIUM	48700		6.92	MDL	22.6	PQL	mg/Kg	J	E, E
POTASSIUM	5080		20.3	MDL	56.5	PQL	mg/Kg	J	Q
STRONTIUM	91.8		0.0700	MDL	0.565	PQL	mg/Kg	J	E, E, Q
TIN	2.06	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.22	J	0.949	MDL	5.65	PQL	mg/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
CALCIUM	41700		6.76	MDL	22.0	PQL	mg/Kg	J	E, E
POTASSIUM	4630		19.8	MDL	55.1	PQL	mg/Kg	J	Q
STRONTIUM	83.7		0.0683	MDL	0.551	PQL	mg/Kg	J	E, E, Q
TIN	1.99	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	3.70	J	0.926	MDL	5.51	PQL	mg/Kg	J	Z

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 10:49:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	79500		34.8	MDL	114	PQL	mg/Kg	J	E, E

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
POTASSIUM	4620		20.4	MDL	56.8	PQL	mg/Kg	J	Q
STRONTIUM	134		0.0704	MDL	0.568	PQL	mg/Kg	J	E, E, Q
TIN	1.21	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	3.16	J	0.954	MDL	5.68	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
CALCIUM	63500		7.32	MDL	23.9	PQL	mg/Kg	J	E, E
POTASSIUM	4990		21.5	MDL	59.7	PQL	mg/Kg	J	Q
STRONTIUM	120		0.0740	MDL	0.597	PQL	mg/Kg	J	E, E, Q
TIN	1.41	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	3.15	J	1.00	MDL	5.97	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	25.9		0.0228	MDL	0.104	PQL	mg/Kg	J	E, A

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0415	MDL	0.415	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.815		0.0518	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.149	J	0.0622	MDL	0.207	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	4.34		0.0622	MDL	0.415	PQL	mg/Kg	J	Q
CADMIUM	0.179		0.0373	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	16.0		0.124	MDL	0.415	PQL	mg/Kg	J	Q
COBALT	5.33		0.0207	MDL	0.104	PQL	mg/Kg	J	Q
LEAD	5.13		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, E
NICKEL	9.28		0.104	MDL	0.415	PQL	mg/Kg	J	Q
SILVER	0.0612	J	0.0124	MDL	0.104	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.173		0.0311	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:25:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	27.7		0.0233	MDL	0.106	PQL	mg/Kg	J	E, A

Sample ID: SL-009-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.08		0.0530	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0834	J	0.0636	MDL	0.212	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	4.81		0.0636	MDL	0.424	PQL	mg/Kg	J	Q
CADMIUM	0.314		0.0382	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	20.3		0.127	MDL	0.424	PQL	mg/Kg	J	Q
COBALT	6.14		0.0212	MDL	0.106	PQL	mg/Kg	J	Q
LEAD	6.01		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	12.8		0.106	MDL	0.424	PQL	mg/Kg	J	Q
SILVER	0.120		0.0127	MDL	0.106	PQL	mg/Kg	J	Q
THALLIUM	0.235		0.0318	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 10:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	30.2		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-017-SA5C-SB-4.0-5.0 **Collected:** 12/9/2010 10:20:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.113	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5C-SB-4.0-5.0 **Collected:** 12/9/2010 10:20:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.680		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5C-SB-4.0-5.0 **Collected:** 12/9/2010 10:20:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0665	U	0.0665	MDL	0.222	PQL	mg/Kg	R	Q
ARSENIC	5.10		0.0665	MDL	0.443	PQL	mg/Kg	J	Q
CADMIUM	0.219		0.0399	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	20.0		0.133	MDL	0.443	PQL	mg/Kg	J	Q
COBALT	8.93		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
LEAD	7.25		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	14.9		0.111	MDL	0.443	PQL	mg/Kg	J	Q
SILVER	0.0486	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.352		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-017-SA5C-SB-9.0-10.0 **Collected:** 12/9/2010 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
VANADIUM	31.8		0.0241	MDL	0.110	PQL	mg/Kg	J	E, A

Sample ID: SL-017-SA5C-SB-9.0-10.0 **Collected:** 12/9/2010 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	0.0439	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-017-SA5C-SB-9.0-10.0 **Collected:** 12/9/2010 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	0.466		0.0548	MDL	0.110	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-017-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 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	0.0658	U	0.0658	MDL	0.219	PQL	mg/Kg	R	Q
ARSENIC	5.44		0.0658	MDL	0.439	PQL	mg/Kg	J	Q
CADMIUM	0.0750	J	0.0395	MDL	0.110	PQL	mg/Kg	J	Z, Q
CHROMIUM	15.8		0.132	MDL	0.439	PQL	mg/Kg	J	Q
COBALT	12.6		0.0219	MDL	0.110	PQL	mg/Kg	J	Q
LEAD	5.87		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	12.1		0.110	MDL	0.439	PQL	mg/Kg	J	Q
SILVER	0.0371	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.291		0.0329	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	26.7		0.0248	MDL	0.113	PQL	mg/Kg	J	E, A

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0943	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.327		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0697	J	0.0676	MDL	0.225	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	5.75		0.0676	MDL	0.451	PQL	mg/Kg	J	Q
CADMIUM	0.203		0.0406	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	16.6		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	5.82		0.0225	MDL	0.113	PQL	mg/Kg	J	Q
LEAD	7.82		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	10.9		0.113	MDL	0.451	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0230	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.395		0.0338	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:20:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	38.1		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:20:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.668		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.127	J	0.0666	MDL	0.222	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	6.92		0.0666	MDL	0.444	PQL	mg/Kg	J	Q
CADMIUM	0.339		0.0400	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	26.8		0.133	MDL	0.444	PQL	mg/Kg	J	Q
COBALT	7.84		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
LEAD	10.6		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	17.0		0.111	MDL	0.444	PQL	mg/Kg	J	Q
SILVER	0.0263	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.353		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
VANADIUM	46.2		0.0245	MDL	0.111	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:24:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.223	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.353		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.0669	U	0.0669	MDL	0.223	PQL	mg/Kg	R	Q
ARSENIC	6.05		0.0669	MDL	0.446	PQL	mg/Kg	J	Q
CADMIUM	0.352		0.0401	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	9.45		0.0223	MDL	0.111	PQL	mg/Kg	J	Q
LEAD	9.63		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	18.6		0.111	MDL	0.446	PQL	mg/Kg	J	Q
SILVER	0.0325	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.377		0.0334	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
VANADIUM	45.1		0.0247	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.221	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.618		0.0562	MDL	0.112	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.0703	J	0.0674	MDL	0.225	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	6.71		0.0674	MDL	0.449	PQL	mg/Kg	J	Q
CADMIUM	0.393		0.0404	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	31.5		0.135	MDL	0.449	PQL	mg/Kg	J	Q
COBALT	9.87		0.0225	MDL	0.112	PQL	mg/Kg	J	Q
LEAD	11.3		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	19.9		0.112	MDL	0.449	PQL	mg/Kg	J	Q
SILVER	0.0260	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.387		0.0337	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:00:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	45.8		0.0247	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.344	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.442		0.0562	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0674	U	0.0674	MDL	0.225	PQL	mg/Kg	R	Q
ARSENIC	7.32		0.0674	MDL	0.449	PQL	mg/Kg	J	Q
CADMIUM	0.457		0.0404	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	31.8		0.135	MDL	0.449	PQL	mg/Kg	J	Q
COBALT	9.51		0.0225	MDL	0.112	PQL	mg/Kg	J	Q
LEAD	10.8		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	20.5		0.112	MDL	0.449	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-062-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:00:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0359	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.411		0.0337	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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
VANADIUM	41.2		0.0244	MDL	0.111	PQL	mg/Kg	J	E, A

Sample ID: SL-064-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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	0.187	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SL-064-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:15:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.611		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-064-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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	0.0771	J	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	6.89		0.0665	MDL	0.443	PQL	mg/Kg	J	Q
CADMIUM	0.339		0.0399	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	29.5		0.133	MDL	0.443	PQL	mg/Kg	J	Q
COBALT	9.34		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
LEAD	10.4		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E
NICKEL	19.4		0.111	MDL	0.443	PQL	mg/Kg	J	Q
SILVER	0.0352	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.386		0.0333	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 2:25:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	39.3		0.0236	MDL	0.107	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-065-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-065-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.460		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-065-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0643	U	0.0643	MDL	0.214	PQL	mg/Kg	R	Q
ARSENIC	5.04		0.0643	MDL	0.429	PQL	mg/Kg	J	Q
CADMIUM	0.298		0.0386	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	24.2		0.129	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	7.63		0.0214	MDL	0.107	PQL	mg/Kg	J	Q
LEAD	8.80		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E
NICKEL	16.3		0.107	MDL	0.429	PQL	mg/Kg	J	Q
SILVER	0.0392	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.312		0.0321	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-067-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
VANADIUM	25.1		0.0237	MDL	0.108	PQL	mg/Kg	J	E, A

Sample ID: SL-067-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.148	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-067-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.641		0.0539	MDL	0.108	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-067-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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	0.0647	U	0.0647	MDL	0.216	PQL	mg/Kg	R	Q
ARSENIC	4.44		0.0647	MDL	0.431	PQL	mg/Kg	J	Q
CADMIUM	0.333		0.0388	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	20.1		0.129	MDL	0.431	PQL	mg/Kg	J	Q
COBALT	6.53		0.0216	MDL	0.108	PQL	mg/Kg	J	Q
LEAD	9.23		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	13.2		0.108	MDL	0.431	PQL	mg/Kg	J	Q
SILVER	0.0257	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.207		0.0323	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-070-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:34:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	45.1		0.0254	MDL	0.115	PQL	mg/Kg	J	E, A

Sample ID: SL-070-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:34:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.243	J	0.0462	MDL	0.462	PQL	mg/Kg	J	Z

Sample ID: SL-070-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:34:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.447		0.0577	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-070-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:34:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0788	J	0.0693	MDL	0.231	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	5.87		0.0693	MDL	0.462	PQL	mg/Kg	J	Q
CADMIUM	0.355		0.0416	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	28.8		0.139	MDL	0.462	PQL	mg/Kg	J	Q
COBALT	9.76		0.0231	MDL	0.115	PQL	mg/Kg	J	Q
LEAD	9.85		0.0120	MDL	0.231	PQL	mg/Kg	J	Q, E
NICKEL	20.6		0.115	MDL	0.462	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-070-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 1:34:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0307	J	0.0139	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.357		0.0346	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-228-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 9:12:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	23.8		0.0300	MDL	0.137	PQL	mg/Kg	J	E, A

Sample ID: SL-228-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 9:12:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.101	J	0.0546	MDL	0.546	PQL	mg/Kg	J	Z

Sample ID: SL-228-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 9:12:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.567		0.0683	MDL	0.137	PQL	mg/Kg	J	Q

Sample ID: SL-228-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 9:12:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0967	J	0.0819	MDL	0.273	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	4.24		0.0819	MDL	0.546	PQL	mg/Kg	J	Q
CADMIUM	0.320		0.0492	MDL	0.137	PQL	mg/Kg	J	Q
CHROMIUM	23.3		0.164	MDL	0.546	PQL	mg/Kg	J	Q
COBALT	6.02		0.0273	MDL	0.137	PQL	mg/Kg	J	Q
LEAD	12.3		0.0142	MDL	0.273	PQL	mg/Kg	J	Q, E
NICKEL	15.4		0.137	MDL	0.546	PQL	mg/Kg	J	Q
SILVER	0.0297	J	0.0164	MDL	0.137	PQL	mg/Kg	J	Z, Q
THALLIUM	0.240		0.0410	MDL	0.137	PQL	mg/Kg	J	Q

Sample ID: SL-229-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 8:40:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	25.6		0.0248	MDL	0.113	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.162	J	0.0451	MDL	0.451	PQL	mg/Kg	J	Z

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:40:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.21		0.0564	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.104	J	0.0677	MDL	0.226	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	5.27		0.0677	MDL	0.451	PQL	mg/Kg	J	Q
CADMIUM	0.213		0.0406	MDL	0.113	PQL	mg/Kg	J	Q
CHROMIUM	22.6		0.135	MDL	0.451	PQL	mg/Kg	J	Q
COBALT	5.92		0.0226	MDL	0.113	PQL	mg/Kg	J	Q
LEAD	7.53		0.0117	MDL	0.226	PQL	mg/Kg	J	Q, E
NICKEL	14.2		0.113	MDL	0.451	PQL	mg/Kg	J	Q
SILVER	0.0404	J	0.0135	MDL	0.113	PQL	mg/Kg	J	Z, Q
THALLIUM	0.257		0.0338	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	41.4		0.0246	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.244	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.686		0.0559	MDL	0.112	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-232-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 12:59:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0843	J	0.0671	MDL	0.224	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	7.13		0.0671	MDL	0.447	PQL	mg/Kg	J	Q
CADMIUM	0.470		0.0403	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	30.5		0.134	MDL	0.447	PQL	mg/Kg	J	Q
COBALT	9.76		0.0224	MDL	0.112	PQL	mg/Kg	J	Q
LEAD	11.8		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, E
NICKEL	20.1		0.112	MDL	0.447	PQL	mg/Kg	J	Q
SILVER	0.0305	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.393		0.0336	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 12:46:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	45.7		0.0247	MDL	0.112	PQL	mg/Kg	J	E, A

Sample ID: SL-233-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 12:46:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.217	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z

Sample ID: SL-233-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 12:46:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.543		0.0562	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-233-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 12:46:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0837	J	0.0674	MDL	0.225	PQL	mg/Kg	UJ	Q, Q, B
ARSENIC	6.21		0.0674	MDL	0.450	PQL	mg/Kg	J	Q
CADMIUM	0.374		0.0405	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.135	MDL	0.450	PQL	mg/Kg	J	Q
COBALT	10.0		0.0225	MDL	0.112	PQL	mg/Kg	J	Q
LEAD	10.6		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, E
NICKEL	19.5		0.112	MDL	0.450	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-233-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:46:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0386	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.377		0.0337	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
VANADIUM	46.5		0.0252	MDL	0.115	PQL	mg/Kg	J	E, A

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.258	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.441		0.0574	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.0688	U	0.0688	MDL	0.229	PQL	mg/Kg	R	Q
ARSENIC	6.85		0.0688	MDL	0.459	PQL	mg/Kg	J	Q
CADMIUM	0.348		0.0413	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	31.3		0.138	MDL	0.459	PQL	mg/Kg	J	Q
COBALT	9.75		0.0229	MDL	0.115	PQL	mg/Kg	J	Q
LEAD	10.4		0.0119	MDL	0.229	PQL	mg/Kg	J	Q, E
NICKEL	21.0		0.115	MDL	0.459	PQL	mg/Kg	J	Q
SILVER	0.0302	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z, Q
THALLIUM	0.371		0.0344	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
VANADIUM	49.3		0.0255	MDL	0.116	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.229	J	0.0464	MDL	0.464	PQL	mg/Kg	J	Z

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:04:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.408		0.0580	MDL	0.116	PQL	mg/Kg	J	Q

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.0696	U	0.0696	MDL	0.232	PQL	mg/Kg	R	Q
ARSENIC	6.39		0.0696	MDL	0.464	PQL	mg/Kg	J	Q
CADMIUM	0.349		0.0418	MDL	0.116	PQL	mg/Kg	J	Q
CHROMIUM	29.7		0.139	MDL	0.464	PQL	mg/Kg	J	Q
COBALT	9.12		0.0232	MDL	0.116	PQL	mg/Kg	J	Q
LEAD	9.92		0.0121	MDL	0.232	PQL	mg/Kg	J	Q, E
NICKEL	18.5		0.116	MDL	0.464	PQL	mg/Kg	J	Q
SILVER	0.0190	J	0.0139	MDL	0.116	PQL	mg/Kg	J	Z, Q
THALLIUM	0.363		0.0348	MDL	0.116	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **Matrix:** SO

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
HEXAVALENT CHROMIUM	0.74	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.71	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 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
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.38	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.44	J	0.24	MDL	1.2	PQL	mg/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
HEXAVALENT CHROMIUM	0.41	J	0.28	MDL	1.4	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.50	J	0.23	MDL	1.2	PQL	mg/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
HEXAVALENT CHROMIUM	0.39	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A 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
MERCURY	0.0126	J	0.0028	MDL	0.0969	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

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
MERCURY	0.0138	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

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
MERCURY	0.0352	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

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
MERCURY	0.0175	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

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
MERCURY	0.0124	J	0.0032	MDL	0.111	PQL	mg/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
MERCURY	0.0106	J	0.0031	MDL	0.110	PQL	mg/Kg	J	Z

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
MERCURY	0.0071	J	0.0030	MDL	0.104	PQL	mg/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
MERCURY	0.0090	J	0.0032	MDL	0.110	PQL	mg/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
MERCURY	0.0087	J	0.0038	MDL	0.134	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A Matrix: SO

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
MERCURY	0.0185	J	0.0030	MDL	0.106	PQL	mg/Kg	J	Z

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
MERCURY	0.0050	J	0.0031	MDL	0.107	PQL	mg/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
MERCURY	0.0066	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

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
MERCURY	0.0053	J	0.0033	MDL	0.117	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A Matrix: SO

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.064	J	0.037	MDL	0.17	PQL	ug/Kg	J	Z, S

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
4,4'-DDE	0.088	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z
4,4'-DDT	0.29	J	0.077	MDL	0.40	PQL	ug/Kg	J	Z, L

Sample ID: SL-070-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR EPOXIDE	0.11	J	0.11	MDL	0.20	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8081A **Matrix:** SO

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.12	J	0.068	MDL	0.19	PQL	ug/Kg	J	Z
METHOXYCHLOR	0.96	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z, L

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
4,4'-DDT	0.14	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z, L
ENDRIN ALDEHYDE	0.10	J	0.076	MDL	0.39	PQL	ug/Kg	J	Z
HEPTACHLOR EPOXIDE	0.074	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *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	1.5	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:25:00 *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 1254	0.86	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	1.4	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *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	1.6	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	7.7	J	1.8	MDL	9.4	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
AROCLOR 1260	0.90	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-064-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
AROCLOR 1254	7.1		0.37	MDL	1.9	PQL	ug/Kg	J	S
AROCLOR 1260	5.7		0.37	MDL	1.9	PQL	ug/Kg	J	S
Aroclor 5460	2.6	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, S

Sample ID: SL-065-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:25:00 *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	3.1	J	0.73	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
AROCLOR 1260	0.73	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *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 1248	1.9	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5460	1.6	J	1.2	MDL	3.8	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:46:00 *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	3.4	J	0.75	MDL	3.9	PQL	ug/Kg	J	Z
Aroclor 5460	3.2	J	2.3	MDL	7.5	PQL	ug/Kg	J	Z

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:04:00 *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	1.2	J	0.40	MDL	2.1	PQL	ug/Kg	J	Z
AROCLOR 1260	1.0	J	0.40	MDL	2.1	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Method Category: SVOA

Method: 8151A **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
2,4,5-TP (Silvex)	0.078	U	0.078	MDL	0.18	PQL	ug/Kg	R	Q
2,4-DB	0.64	U	0.64	MDL	1.8	PQL	ug/Kg	R	Q
DINOSEB	0.83	U	0.83	MDL	2.5	PQL	ug/Kg	R	Q, L
MCPP	78	U	78	MDL	260	PQL	ug/Kg	R	Q

Sample ID: SL-009-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 8:25:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

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
DICAMBA	0.47	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

Sample ID: SL-051-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 1:20:00 ***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	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPA	170	J	84	MDL	280	PQL	ug/Kg	J	Z
MCPP	200	J	83	MDL	280	PQL	ug/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
2,4-DB	0.89	J	0.71	MDL	2.0	PQL	ug/Kg	J	Z
DINOSEB	0.92	U	0.92	MDL	2.8	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.92	U	0.92	MDL	2.7	PQL	ug/Kg	R	L
MCPA	110	J	87	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-064-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-065-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-067-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-070-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:34:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.94	U	0.94	MDL	2.8	PQL	ug/Kg	R	L

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
2,4-DB	1.0	J	0.86	MDL	2.3	PQL	ug/Kg	J	Z
DINOSEB	1.1	U	1.1	MDL	3.3	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:40:00 *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	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L
MCPP	180	J	85	MDL	280	PQL	ug/Kg	J	Z

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
2,4-DB	1.0	J	0.71	MDL	2.0	PQL	ug/Kg	J	Z
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L
MCPA	200	J	88	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:46:00 *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	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L
MCPA	190	J	86	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L
MCPA	150	J	88	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.97	U	0.97	MDL	2.9	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *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)PYRENE	22	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

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
3,5-Dimethylphenol	130	J	37	MDL	180	PQL	ug/Kg	J	Z
BENZIDINE	1300	U	1300	MDL	3700	PQL	ug/Kg	R	Q

Sample ID: SL-064-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BENZO(A)PYRENE	58	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BENZO(A)ANTHRACENE	97	J	90	MDL	900	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	240	J	90	MDL	900	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	130	J	90	MDL	900	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	120	J	90	MDL	900	PQL	ug/Kg	J	Z
CHRYSENE	330	J	90	MDL	900	PQL	ug/Kg	J	Z
PYRENE	98	J	90	MDL	900	PQL	ug/Kg	J	Z

Sample ID: SL-228-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:12:00 *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	65	J	23	MDL	230	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	54	J	23	MDL	230	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	82	J	23	MDL	230	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	44	J	23	MDL	230	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	36	J	23	MDL	230	PQL	ug/Kg	J	Z
CHRYSENE	88	J	23	MDL	230	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	30	J	23	MDL	230	PQL	ug/Kg	J	Z
Di-n-butylphthalate	26	J	23	MDL	230	PQL	ug/Kg	J	Z
FLUORANTHENE	160	J	23	MDL	230	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	36	J	23	MDL	230	PQL	ug/Kg	J	Z
PHENANTHRENE	79	J	23	MDL	230	PQL	ug/Kg	J	Z
PYRENE	180	J	23	MDL	230	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z

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

Sample ID: SL-008-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:22:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHENE	1.5	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.2	MDL	19	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	0.83	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	1.6	J	0.69	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.2	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.2	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.82	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-017-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	0.74	U	0.74	MDL	1.8	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	9.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.82	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-017-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	7.1	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	6.9	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-048-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	14	J	6.8	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-051-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 1:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.92	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	19	J	6.7	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	0.97	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.95	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-059-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-061-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
Butylbenzylphthalate	16	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.68	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-062-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	15	J	7.0	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: DE034 **Laboratory:** LL

EDD Filename: PrepDE034_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-064-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.8	J	6.7	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.6	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	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-065-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 2:25:00 ***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	0.87	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.3	J	6.6	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	0.60	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-067-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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
ANTHRACENE	2.0	J	1.8	MDL	9.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	35	J	32	MDL	97	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	6.2	J	3.6	MDL	9.0	PQL	ug/Kg	J	Z

Sample ID: SL-070-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 1:34:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.59	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	7.1	MDL	21	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.5	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.5	J	7.1	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-228-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 9:12:00 ***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	12	J	8.3	MDL	25	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-229-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:40:00 *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	11	J	6.8	MDL	21	PQL	ug/Kg	J	Z

Sample ID: SL-232-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:59:00 *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(G,H,I)PERYLENE	1.1	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	6.9	MDL	21	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.90	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-233-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 12:46:00 *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	0.85	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.6	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.90	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	6.8	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.4	J	6.8	MDL	20	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-octylphthalate	7.1	J	6.8	MDL	20	PQL	ug/Kg	J	Z
FLUORANTHENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-299-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BENZO(A)ANTHRACENE	0.99	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.84	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	11	J	7.0	MDL	21	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-300-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:04:00 *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(G,H,I)PERYLENE	1.6	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	7.2	MDL	22	PQL	ug/Kg	J	Z

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

Sample ID: SL-017-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 10:20:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	240	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-017-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 10:30:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	230	J	110	MDL	560	PQL	ug/Kg	J	Z

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

Sample ID: SL-017-SA5C-SB-4.0-5.0 *Collected:* 12/9/2010 10:20:00 *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	1.1	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-017-SA5C-SB-9.0-10.0 *Collected:* 12/9/2010 10:30:00 *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	0.97	J	0.24	MDL	4.1	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE034 | Laboratory: LL

EDD Filename: PrepDE034_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: DE034 **Laboratory: LL**

EDD Filename: PrepDE034_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: DE034 **Laboratory: LL**

EDD Filename: PrepDE034_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

DE034

Method Blank Outlier Report

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **314.0**
Matrix: **SO**

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
B0356B271414A	12/27/2010 2:14:00 PM	PERCHLORATE	14.6 ug/Kg	SL-008-SA5B-SS-0.0-0.5 SL-017-SA5C-SB-4.0-5.0 SL-017-SA5C-SB-9.0-10.0

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34908CB222245	12/17/2010 10:45:00 PM	PHOSPHORUS TIN	1.90 mg/Kg 1.82 mg/Kg	SL-008-SA5B-SS-0.0-0.5 SL-009-SA5B-SS-0.0-0.5 SL-017-SA5C-SB-4.0-5.0 SL-017-SA5C-SB-9.0-10.0 SL-048-SA5B-SS-0.0-0.5 SL-051-SA5B-SS-0.0-0.5 SL-059-SA5B-SS-0.0-0.5 SL-061-SA5B-SS-0.0-0.5 SL-062-SA5B-SS-0.0-0.5 SL-064-SA5B-SS-0.0-0.5 SL-065-SA5B-SS-0.0-0.5 SL-067-SA5B-SS-0.0-0.5 SL-070-SA5B-SS-0.0-0.5 SL-228-SA5B-SS-0.0-0.5 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-008-SA5B-SS-0.0-0.5(RES)	TIN	1.59 mg/Kg	1.59U mg/Kg
SL-009-SA5B-SS-0.0-0.5(RES)	TIN	1.92 mg/Kg	1.92U mg/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	TIN	1.77 mg/Kg	1.77U mg/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-048-SA5B-SS-0.0-0.5(RES)	TIN	3.11 mg/Kg	3.11U mg/Kg
SL-051-SA5B-SS-0.0-0.5(RES)	TIN	2.10 mg/Kg	2.10U mg/Kg
SL-059-SA5B-SS-0.0-0.5(RES)	TIN	1.35 mg/Kg	1.35U mg/Kg
SL-061-SA5B-SS-0.0-0.5(RES)	TIN	2.04 mg/Kg	2.04U mg/Kg
SL-062-SA5B-SS-0.0-0.5(RES)	TIN	1.51 mg/Kg	1.51U mg/Kg
SL-064-SA5B-SS-0.0-0.5(RES)	TIN	1.79 mg/Kg	1.79U mg/Kg
SL-065-SA5B-SS-0.0-0.5(RES)	TIN	2.08 mg/Kg	2.08U mg/Kg
SL-067-SA5B-SS-0.0-0.5(RES)	TIN	1.39 mg/Kg	1.39U mg/Kg
SL-070-SA5B-SS-0.0-0.5(RES)	TIN	1.26 mg/Kg	1.26U mg/Kg
SL-228-SA5B-SS-0.0-0.5(RES)	TIN	1.91 mg/Kg	1.91U mg/Kg
SL-229-SA5B-SS-0.0-0.5(RES)	TIN	1.59 mg/Kg	1.59U mg/Kg
SL-232-SA5B-SS-0.0-0.5(RES)	TIN	2.06 mg/Kg	2.06U mg/Kg
SL-233-SA5B-SS-0.0-0.5(RES)	TIN	1.99 mg/Kg	1.99U mg/Kg
SL-299-SA5B-SS-0.0-0.5(RES)	TIN	1.21 mg/Kg	1.21U mg/Kg
SL-300-SA5B-SS-0.0-0.5(RES)	TIN	1.41 mg/Kg	1.41U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB16B212115A	12/14/2010 9:15:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.22 ug/Kg 1.3 ug/Kg 0.09 ug/Kg	SL-017-SA5C-SB-4.0-5.0 SL-017-SA5C-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-017-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.3U ug/Kg
SL-017-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.3U ug/Kg
SL-017-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.97 ug/Kg	4.1U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: DE034_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-008-SA5B-SS-0.0-0.5MS	2,4,5-TP (Silvex)	0	0	10.00-183.00	-	2,4,5-TP (Silvex)	
SL-008-SA5B-SS-0.0-0.5MSD	2,4-DB	0	-	20.00-170.00	200 (50.00)	2,4-DB	J (all detects)
(SL-008-SA5B-SS-0.0-0.5)	DINOSEB	0	0	1.00-44.00	-	DINOSEB	R (all non-detects)
	MCPP	0	0	16.00-174.00	-	MCPP	

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-008-SA5B-SS-0.0-0.5MS	ARSENIC	128	165	75.00-125.00	-	ARSENIC	
SL-008-SA5B-SS-0.0-0.5MSD	CADMIUM	129	144	75.00-125.00	-	CADMIUM	
(SL-008-SA5B-SS-0.0-0.5	CHROMIUM	-	154	75.00-125.00	-	CHROMIUM	
SL -009-SA5B-SS-0.0-0.5	COBALT	-	128	75.00-125.00	-	COBALT	
SL -017-SA5C-SB-4.0-5.0	NICKEL	-	139	75.00-125.00	-	NICKEL	
SL -017-SA5C-SB-9.0-10.0	SILVER	-	130	75.00-125.00	-	SILVER	
SL -048-SA5B-SS-0.0-0.5	THALLIUM	-	135	75.00-125.00	-	THALLIUM	
SL -051-SA5B-SS-0.0-0.5	ZINC	375	355	75.00-125.00	-	ZINC	
SL -059-SA5B-SS-0.0-0.5							
SL -061-SA5B-SS-0.0-0.5							
SL -062-SA5B-SS-0.0-0.5							J(all detects)
SL -064-SA5B-SS-0.0-0.5							
SL -065-SA5B-SS-0.0-0.5							Zn No Qual,
SL -067-SA5B-SS-0.0-0.5							>4x
SL -070-SA5B-SS-0.0-0.5							
SL -228-SA5B-SS-0.0-0.5							
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)							
SL-008-SA5B-SS-0.0-0.5MS	ANTIMONY	36	27	75.00-125.00	-	ANTIMONY	
SL-008-SA5B-SS-0.0-0.5MSD							
(SL-008-SA5B-SS-0.0-0.5							
SL -009-SA5B-SS-0.0-0.5							
SL -017-SA5C-SB-4.0-5.0							
SL -017-SA5C-SB-9.0-10.0							
SL -048-SA5B-SS-0.0-0.5							
SL -051-SA5B-SS-0.0-0.5							
SL -059-SA5B-SS-0.0-0.5							
SL -061-SA5B-SS-0.0-0.5							
SL -062-SA5B-SS-0.0-0.5							J(all detects)
SL -064-SA5B-SS-0.0-0.5							R(all non-detects)
SL -065-SA5B-SS-0.0-0.5							
SL -067-SA5B-SS-0.0-0.5							
SL -070-SA5B-SS-0.0-0.5							
SL -228-SA5B-SS-0.0-0.5							
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)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_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-008-SA5B-SS-0.0-0.5MS **SL-008-SA5B-SS-0.0-0.5MSD** (SL-008-SA5B-SS-0.0-0.5 SL -009-SA5B-SS-0.0-0.5 SL -017-SA5C-SB-4.0-5.0 SL -017-SA5C-SB-9.0-10.0 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-SA5B-SS-0.0-0.5 SL -070-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	LEAD	143	226	75.00-125.00	25 (20.00)	LEAD	J(all detects) UJ(all non-detects)
SL-008-SA5B-SS-0.0-0.5MS **SL-008-SA5B-SS-0.0-0.5MSD** (SL-008-SA5B-SS-0.0-0.5 SL -009-SA5B-SS-0.0-0.5 SL -017-SA5C-SB-4.0-5.0 SL -017-SA5C-SB-9.0-10.0 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-SA5B-SS-0.0-0.5 SL -070-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	MOLYBDENUM	130	151	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-008-SA5B-SS-0.0-0.5MS **SL-008-SA5B-SS-0.0-0.5MSD** (SL-008-SA5B-SS-0.0-0.5 SL -009-SA5B-SS-0.0-0.5 SL -017-SA5C-SB-4.0-5.0 SL -017-SA5C-SB-9.0-10.0 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-SA5B-SS-0.0-0.5 SL -070-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	BARIUM	194	364	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: DE034_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-008-SA5B-SS-0.0-0.5MS	ALUMINUM	902	1684	75.00-125.00	-	ALUMINUM	
SL-008-SA5B-SS-0.0-0.5MSD	IRON	509	2302	75.00-125.00	-	IRON	
(SL-008-SA5B-SS-0.0-0.5	MAGNESIUM	197	318	75.00-125.00	-	MAGNESIUM	
SL-009-SA5B-SS-0.0-0.5	MANGANESE	-	165	75.00-125.00	-	MANGANESE	
SL-017-SA5C-SB-4.0-5.0	PHOSPHORUS	141	-	75.00-125.00	-	PHOSPHORUS	
SL-017-SA5C-SB-9.0-10.0	POTASSIUM	156	145	75.00-125.00	-	POTASSIUM	
SL-048-SA5B-SS-0.0-0.5							
SL-051-SA5B-SS-0.0-0.5							
SL-059-SA5B-SS-0.0-0.5							
SL-061-SA5B-SS-0.0-0.5							
SL-062-SA5B-SS-0.0-0.5							J(all detects)
SL-064-SA5B-SS-0.0-0.5							
SL-065-SA5B-SS-0.0-0.5							Al Fe, Mg,
SL-067-SA5B-SS-0.0-0.5							Mn, P No
SL-070-SA5B-SS-0.0-0.5							Qual, >4x
SL-228-SA5B-SS-0.0-0.5							
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)							
SL-008-SA5B-SS-0.0-0.5MS	CALCIUM	-7886	-6941	75.00-125.00	32 (20.00)	CALCIUM	
SL-008-SA5B-SS-0.0-0.5MSD	STRONTIUM	-127	-88	75.00-125.00	24 (20.00)	STRONTIUM	
(SL-008-SA5B-SS-0.0-0.5							
SL-009-SA5B-SS-0.0-0.5							
SL-017-SA5C-SB-4.0-5.0							J(all detects)
SL-017-SA5C-SB-9.0-10.0							UJ(all non-detects)
SL-048-SA5B-SS-0.0-0.5							
SL-051-SA5B-SS-0.0-0.5							Ca No Qual %R,
SL-059-SA5B-SS-0.0-0.5							>4x
SL-061-SA5B-SS-0.0-0.5							
SL-062-SA5B-SS-0.0-0.5							J(all detects)
SL-064-SA5B-SS-0.0-0.5							R(all non-detects)
SL-065-SA5B-SS-0.0-0.5							
SL-067-SA5B-SS-0.0-0.5							Sr only
SL-070-SA5B-SS-0.0-0.5							
SL-228-SA5B-SS-0.0-0.5							
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)							

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-017-SA5C-SB-4.0-5.0MSD	Butylbenzylphthalate	-	-	73.00-140.00	42 (30.00)	Butylbenzylphthalate	
(SL-017-SA5C-SB-4.0-5.0)	N-NITROSODIMETHYLAMINE	-	-	48.00-113.00	31 (30.00)	N-NITROSODIMETHYLAMINE	J(all detects)
SL-017-SA5C-SB-4.0-5.0MS	BENZO(G,H,I)PERYLENE	32	-	33.00-141.00	-	BENZO(G,H,I)PERYLENE	J(all detects)
(SL-017-SA5C-SB-4.0-5.0)							UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: DE034_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-017-SA5C-SB-4.0-5.0MSD (SL-017-SA5C-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	44 (30.00)	2,4-DINITROPHENOL	J(all detects)
SL-017-SA5C-SB-4.0-5.0MS SL-017-SA5C-SB-4.0-5.0MSD (SL-017-SA5C-SB-4.0-5.0)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(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-017-SA5C-SB-4.0-5.0MS SL-017-SA5C-SB-4.0-5.0MSD (SL-008-SA5B-SS-0.0-0.5 SL-009-SA5B-SS-0.0-0.5 SL-017-SA5C-SB-4.0-5.0 SL-017-SA5C-SB-9.0-10.0 SL-048-SA5B-SS-0.0-0.5 SL-051-SA5B-SS-0.0-0.5 SL-059-SA5B-SS-0.0-0.5 SL-061-SA5B-SS-0.0-0.5 SL-062-SA5B-SS-0.0-0.5 SL-064-SA5B-SS-0.0-0.5 SL-065-SA5B-SS-0.0-0.5 SL-067-SA5B-SS-0.0-0.5 SL-070-SA5B-SS-0.0-0.5 SL-228-SA5B-SS-0.0-0.5 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)	TITANIUM	302	338	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-062-SA5B-SS-0.0-0.5MS (SL-059-SA5B-SS-0.0-0.5 SL-061-SA5B-SS-0.0-0.5 SL-062-SA5B-SS-0.0-0.5 SL-064-SA5B-SS-0.0-0.5 SL-065-SA5B-SS-0.0-0.5 SL-067-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)	FLUORIDE	67	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5B-SS-0.0-0.5DUP	CALCIUM	125	20.00	
(SL-008-SA5B-SS-0.0-0.5	STRONTIUM	143	20.00	
SL -009-SA5B-SS-0.0-0.5	Zirconium	32	20.00	
SL -017-SA5C-SB-4.0-5.0				
SL -017-SA5C-SB-9.0-10.0				
SL -048-SA5B-SS-0.0-0.5				
SL -051-SA5B-SS-0.0-0.5				
SL -059-SA5B-SS-0.0-0.5				
SL -061-SA5B-SS-0.0-0.5				
SL -062-SA5B-SS-0.0-0.5				J (all detects)
SL -064-SA5B-SS-0.0-0.5				UJ (all non-detects)
SL -065-SA5B-SS-0.0-0.5				
SL -067-SA5B-SS-0.0-0.5				Zr No Qual
SL -070-SA5B-SS-0.0-0.5				Ok by difference
SL -228-SA5B-SS-0.0-0.5				
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)				

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5B-SS-0.0-0.5DUP	ANTIMONY	82	20.00	
(SL-008-SA5B-SS-0.0-0.5	SELENIUM	38	20.00	
SL -009-SA5B-SS-0.0-0.5	THALLIUM	34	20.00	
SL -017-SA5C-SB-4.0-5.0	VANADIUM	25	20.00	
SL -017-SA5C-SB-9.0-10.0				
SL -048-SA5B-SS-0.0-0.5				
SL -051-SA5B-SS-0.0-0.5				
SL -059-SA5B-SS-0.0-0.5				
SL -061-SA5B-SS-0.0-0.5				
SL -062-SA5B-SS-0.0-0.5				J(all detects)
SL -064-SA5B-SS-0.0-0.5				UJ(all non-detects)
SL -065-SA5B-SS-0.0-0.5				
SL -067-SA5B-SS-0.0-0.5				Sb, Se, Tl
SL -070-SA5B-SS-0.0-0.5				No Qual
SL -228-SA5B-SS-0.0-0.5				OK by difference
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)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-008-SA5B-SS-0.0-0.5DUP (SL-008-SA5B-SS-0.0-0.5 SL -009-SA5B-SS-0.0-0.5 SL -017-SA5C-SB-4.0-5.0 SL -017-SA5C-SB-9.0-10.0 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-SA5B-SS-0.0-0.5 SL -070-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	MERCURY	43	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-051-SA5B-SS-0.0-0.5DUP (SL-008-SA5B-SS-0.0-0.5 SL -009-SA5B-SS-0.0-0.5 SL -017-SA5C-SB-4.0-5.0 SL -017-SA5C-SB-9.0-10.0 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-SA5B-SS-0.0-0.5 SL -070-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	HEXAVALENT CHROMIUM	36	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-062-SA5B-SS-0.0-0.5DUP (SL-059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-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)	FLUORIDE	42	20.00	No Qual OK by difference

Method: 314.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-009-SA5B-SS-0.0-0.5DUP (SL-009-SA5B-SS-0.0-0.5 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	PERCHLORATE	200	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03495AQ240304A (SL-008-SA5B-SS-0.0-0.5 SL-009-SA5B-SS-0.0-0.5 SL-048-SA5B-SS-0.0-0.5 SL-051-SA5B-SS-0.0-0.5 SL-059-SA5B-SS-0.0-0.5 SL-061-SA5B-SS-0.0-0.5 SL-062-SA5B-SS-0.0-0.5 SL-064-SA5B-SS-0.0-0.5 SL-065-SA5B-SS-0.0-0.5 SL-067-SA5B-SS-0.0-0.5 SL-070-SA5B-SS-0.0-0.5 SL-228-SA5B-SS-0.0-0.5 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)	DICHLOROPROP	144	-	60.00-141.00	-	DICHLOROPROP	J (all detects)
P03495AQ240304A (SL-008-SA5B-SS-0.0-0.5 SL-009-SA5B-SS-0.0-0.5 SL-048-SA5B-SS-0.0-0.5 SL-051-SA5B-SS-0.0-0.5 SL-059-SA5B-SS-0.0-0.5 SL-061-SA5B-SS-0.0-0.5 SL-062-SA5B-SS-0.0-0.5 SL-064-SA5B-SS-0.0-0.5 SL-065-SA5B-SS-0.0-0.5 SL-067-SA5B-SS-0.0-0.5 SL-070-SA5B-SS-0.0-0.5 SL-228-SA5B-SS-0.0-0.5 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)	DINOSEB	6	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03501AQ241924A (SL-008-SA5B-SS-0.0-0.5 SL-009-SA5B-SS-0.0-0.5 SL-048-SA5B-SS-0.0-0.5 SL-051-SA5B-SS-0.0-0.5 SL-059-SA5B-SS-0.0-0.5 SL-062-SA5B-SS-0.0-0.5 SL-064-SA5B-SS-0.0-0.5 SL-065-SA5B-SS-0.0-0.5 SL-067-SA5B-SS-0.0-0.5 SL-228-SA5B-SS-0.0-0.5 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)	4,4'-DDT METHOXYCHLOR	134 141	- -	54.00-130.00 59.00-125.00	- -	4,4'-DDT METHOXYCHLOR	J(all detects)
P03519AQ241754A (SL-061-SA5B-SS-0.0-0.5 SL-070-SA5B-SS-0.0-0.5)	METHOXYCHLOR	131	-	59.00-125.00	-	METHOXYCHLOR	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: DE034 Laboratory: LL

EDD Filename: PrepDE034_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
P34926CQ221432A (SL-008-SA5B-SS-0.0-0.5 SL -009-SA5B-SS-0.0-0.5 SL -017-SA5C-SB-4.0-5.0 SL -017-SA5C-SB-9.0-10.0 SL -048-SA5B-SS-0.0-0.5 SL -051-SA5B-SS-0.0-0.5 SL -059-SA5B-SS-0.0-0.5 SL -061-SA5B-SS-0.0-0.5 SL -062-SA5B-SS-0.0-0.5 SL -064-SA5B-SS-0.0-0.5 SL -065-SA5B-SS-0.0-0.5 SL -067-SA5B-SS-0.0-0.5 SL -070-SA5B-SS-0.0-0.5 SL -228-SA5B-SS-0.0-0.5 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)	ANTIMONY	50	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: PrepDE034_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-008-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	302	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-048-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	121	45.00-120.00	All Target Analytes	J(all detects)
SL-051-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	135	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-064-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	123	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE034 Laboratory: LL

EDD Filename: DE034_v1. eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5B-SS-0.0-0.5	FLUORIDE	J	0.95	1.1	PQL	mg/Kg	J (all detects)
SL-017-SA5C-SB-9.0-10.0	Nitrate-NO3	J	0.96	1.7	PQL	mg/Kg	J (all detects)
SL-048-SA5B-SS-0.0-0.5	FLUORIDE	J	0.98	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-009-SA5B-SS-0.0-0.5	PERCHLORATE	J	21.3	32.1	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.59 1.35	10.2 5.08	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-009-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.92 2.33	10.5 5.25	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-017-SA5C-SB-4.0-5.0	SODIUM TIN Zirconium	J J J	105 1.77 2.11	108 10.8 5.38	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-017-SA5C-SB-9.0-10.0	TIN Zirconium	J J	2.56 1.55	10.9 5.43	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-048-SA5B-SS-0.0-0.5	SODIUM TIN	J J	80.4 3.11	109 10.9	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-051-SA5B-SS-0.0-0.5	TIN Zirconium	J J	2.10 2.28	11.1 5.55	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-059-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.35 3.57	11.5 5.74	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-061-SA5B-SS-0.0-0.5	TIN Zirconium	J J	2.04 3.33	11.1 5.56	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-062-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.51 2.72	11.2 5.62	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-064-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.79 2.11	10.8 5.38	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-065-SA5B-SS-0.0-0.5	TIN Zirconium	J J	2.08 2.10	10.9 5.46	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-067-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.39 1.83	10.7 5.33	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-070-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.26 3.14	11.7 5.83	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-228-SA5B-SS-0.0-0.5	SODIUM TIN Zirconium	J J J	72.1 1.91 1.27	135 13.5 6.76	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-229-SA5B-SS-0.0-0.5	TIN Zirconium	J J	1.59 2.55	11.3 5.64	PQL PQL	mg/Kg mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-232-SA5B-SS-0.0-0.5	TIN	J	2.06	11.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.22	5.65	PQL	mg/Kg	
SL-233-SA5B-SS-0.0-0.5	TIN	J	1.99	11.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.70	5.51	PQL	mg/Kg	
SL-299-SA5B-SS-0.0-0.5	TIN	J	1.21	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.16	5.68	PQL	mg/Kg	
SL-300-SA5B-SS-0.0-0.5	TIN	J	1.41	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.15	5.97	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5B-SS-0.0-0.5	ANTIMONY	J	0.149	0.207	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.127	0.415	PQL	mg/Kg	
	SILVER	J	0.0612	0.104	PQL	mg/Kg	
SL-009-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0834	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.223	0.424	PQL	mg/Kg	
SL-017-SA5C-SB-4.0-5.0	SELENIUM	J	0.113	0.443	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0486	0.111	PQL	mg/Kg	
SL-017-SA5C-SB-9.0-10.0	CADMIUM	J	0.0750	0.110	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0439	0.439	PQL	mg/Kg	
	SILVER	J	0.0371	0.110	PQL	mg/Kg	
SL-048-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0697	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0943	0.451	PQL	mg/Kg	
	SILVER	J	0.0230	0.113	PQL	mg/Kg	
SL-051-SA5B-SS-0.0-0.5	ANTIMONY	J	0.127	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.164	0.444	PQL	mg/Kg	
	SILVER	J	0.0263	0.111	PQL	mg/Kg	
SL-059-SA5B-SS-0.0-0.5	SELENIUM	J	0.223	0.446	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0325	0.111	PQL	mg/Kg	
SL-061-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0703	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.221	0.449	PQL	mg/Kg	
	SILVER	J	0.0260	0.112	PQL	mg/Kg	
SL-062-SA5B-SS-0.0-0.5	SELENIUM	J	0.344	0.449	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0359	0.112	PQL	mg/Kg	
SL-064-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0771	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.187	0.443	PQL	mg/Kg	
	SILVER	J	0.0352	0.111	PQL	mg/Kg	
SL-065-SA5B-SS-0.0-0.5	SELENIUM	J	0.178	0.429	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0392	0.107	PQL	mg/Kg	
SL-067-SA5B-SS-0.0-0.5	SELENIUM	J	0.148	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0257	0.108	PQL	mg/Kg	
SL-070-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0788	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.243	0.462	PQL	mg/Kg	
	SILVER	J	0.0307	0.115	PQL	mg/Kg	
SL-228-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0967	0.273	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.101	0.546	PQL	mg/Kg	
	SILVER	J	0.0297	0.137	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-229-SA5B-SS-0.0-0.5	ANTIMONY	J	0.104	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.162	0.451	PQL	mg/Kg	
	SILVER	J	0.0404	0.113	PQL	mg/Kg	
SL-232-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0843	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.244	0.447	PQL	mg/Kg	
	SILVER	J	0.0305	0.112	PQL	mg/Kg	
SL-233-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0837	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.217	0.450	PQL	mg/Kg	
	SILVER	J	0.0386	0.112	PQL	mg/Kg	
SL-299-SA5B-SS-0.0-0.5	SELENIUM	J	0.258	0.459	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0302	0.115	PQL	mg/Kg	
SL-300-SA5B-SS-0.0-0.5	SELENIUM	J	0.229	0.464	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0190	0.116	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.74	1.1	PQL	mg/Kg	J (all detects)
SL-017-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.71	1.1	PQL	mg/Kg	J (all detects)
SL-064-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-067-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.38	1.1	PQL	mg/Kg	J (all detects)
SL-070-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.2	PQL	mg/Kg	J (all detects)
SL-228-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.41	1.4	PQL	mg/Kg	J (all detects)
SL-232-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.2	PQL	mg/Kg	J (all detects)
SL-233-SA5B-SS-0.0-0.5	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-008-SA5B-SS-0.0-0.5	MERCURY	J	0.0126	0.0969	PQL	mg/Kg	J (all detects)
SL-009-SA5B-SS-0.0-0.5	MERCURY	J	0.0138	0.105	PQL	mg/Kg	J (all detects)
SL-051-SA5B-SS-0.0-0.5	MERCURY	J	0.0352	0.111	PQL	mg/Kg	J (all detects)
SL-061-SA5B-SS-0.0-0.5	MERCURY	J	0.0175	0.111	PQL	mg/Kg	J (all detects)
SL-064-SA5B-SS-0.0-0.5	MERCURY	J	0.0124	0.111	PQL	mg/Kg	J (all detects)
SL-065-SA5B-SS-0.0-0.5	MERCURY	J	0.0106	0.110	PQL	mg/Kg	J (all detects)
SL-067-SA5B-SS-0.0-0.5	MERCURY	J	0.0071	0.104	PQL	mg/Kg	J (all detects)
SL-070-SA5B-SS-0.0-0.5	MERCURY	J	0.0090	0.110	PQL	mg/Kg	J (all detects)
SL-228-SA5B-SS-0.0-0.5	MERCURY	J	0.0087	0.134	PQL	mg/Kg	J (all detects)
SL-229-SA5B-SS-0.0-0.5	MERCURY	J	0.0185	0.106	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-232-SA5B-SS-0.0-0.5	MERCURY	J	0.0050	0.107	PQL	mg/Kg	J (all detects)
SL-233-SA5B-SS-0.0-0.5	MERCURY	J	0.0066	0.113	PQL	mg/Kg	J (all detects)
SL-300-SA5B-SS-0.0-0.5	MERCURY	J	0.0053	0.117	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5C-SB-4.0-5.0	ETHANOL	J	240	550	PQL	ug/Kg	J (all detects)
SL-017-SA5C-SB-9.0-10.0	ETHANOL	J	230	560	PQL	ug/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.064	0.17	PQL	ug/Kg	J (all detects)
SL-062-SA5B-SS-0.0-0.5	4,4'-DDE 4,4'-DDT	J J	0.088 0.29	0.40 0.40	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-070-SA5B-SS-0.0-0.5	HEPTACHLOR EPOXIDE	J	0.11	0.20	PQL	ug/Kg	J (all detects)
SL-229-SA5B-SS-0.0-0.5	BETA-BHC METHOXYCHLOR	J J	0.12 0.96	0.19 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-299-SA5B-SS-0.0-0.5	4,4'-DDT ENDRIN ALDEHYDE HEPTACHLOR EPOXIDE	J J J	0.14 0.10 0.074	0.39 0.39 0.19	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5B-SS-0.0-0.5	AROCLOR 1254	J	1.5	1.8	PQL	ug/Kg	J (all detects)
SL-009-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	0.86 1.4	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-048-SA5B-SS-0.0-0.5	AROCLOR 1260	J	1.6	1.9	PQL	ug/Kg	J (all detects)
SL-051-SA5B-SS-0.0-0.5	AROCLOR 1260	J	7.7	9.4	PQL	ug/Kg	J (all detects)
SL-059-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.90	2.0	PQL	ug/Kg	J (all detects)
SL-064-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.6	3.7	PQL	ug/Kg	J (all detects)
SL-065-SA5B-SS-0.0-0.5	AROCLOR 1260	J	3.1	3.8	PQL	ug/Kg	J (all detects)
SL-067-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.73	1.8	PQL	ug/Kg	J (all detects)
SL-232-SA5B-SS-0.0-0.5	AROCLOR 1248 Aroclor 5460	J J	1.9 1.6	2.0 3.8	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-233-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	3.4 3.2	3.9 7.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-300-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.2 1.0	2.1 2.1	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-048-SA5B-SS-0.0-0.5	DICAMBA	J	0.47	1.4	PQL	ug/Kg	J (all detects)
SL-051-SA5B-SS-0.0-0.5	MCPA MCPP	J J	170 200	280 280	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-059-SA5B-SS-0.0-0.5	2,4-DB	J	0.89	2.0	PQL	ug/Kg	J (all detects)
SL-061-SA5B-SS-0.0-0.5	MCPA	J	110	290	PQL	ug/Kg	J (all detects)
SL-228-SA5B-SS-0.0-0.5	2,4-DB	J	1.0	2.3	PQL	ug/Kg	J (all detects)
SL-229-SA5B-SS-0.0-0.5	MCPP	J	180	280	PQL	ug/Kg	J (all detects)
SL-232-SA5B-SS-0.0-0.5	2,4-DB MCPA	J J	1.0 200	2.0 290	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-233-SA5B-SS-0.0-0.5	MCPA	J	190	280	PQL	ug/Kg	J (all detects)
SL-299-SA5B-SS-0.0-0.5	MCPA	J	150	290	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-017-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.11	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-017-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	0.97	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	22	170	PQL	ug/Kg	J (all detects)
SL-017-SA5C-SB-4.0-5.0	3,5-Dimethylphenol	J	130	180	PQL	ug/Kg	J (all detects)
SL-064-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	58	190	PQL	ug/Kg	J (all detects)
SL-067-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE BENZO(A)PYRENE BENZO(B)FLUORANTHENE BENZO(G,H,I)PERYLENE CHRYSENE PYRENE	J J J J J J	97 240 130 120 330 98	900 900 900 900 900 900	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: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-228-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	65	230	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	54	230	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	82	230	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	44	230	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	36	230	PQL	ug/Kg	
	CHRYSENE	J	88	230	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	30	230	PQL	ug/Kg	
	Di-n-butylphthalate	J	26	230	PQL	ug/Kg	
	FLUORANTHENE	J	160	230	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	36	230	PQL	ug/Kg	
	PHENANTHRENE	J	79	230	PQL	ug/Kg	
	PYRENE	J	180	230	PQL	ug/Kg	
SL-232-SA5B-SS-0.0-0.5	CHRYSENE	J	21	190	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-008-SA5B-SS-0.0-0.5	ACENAPHTHENE	J	1.5	1.7	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.83	1.7	PQL	ug/Kg	
	FLUORENE	J	1.6	1.7	PQL	ug/Kg	
SL-009-SA5B-SS-0.0-0.5	ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.82	1.8	PQL	ug/Kg	
SL-017-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	9.9	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.82	1.8	PQL	ug/Kg	
SL-017-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.1	20	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	6.9	20	PQL	ug/Kg	
SL-048-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	20	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	14	20	PQL	ug/Kg	
SL-051-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	8.6	20	PQL	ug/Kg	
	CHRYSENE	J	0.92	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	19	20	PQL	ug/Kg	
	FLUORANTHENE	J	0.97	1.8	PQL	ug/Kg	
	PYRENE	J	0.95	1.8	PQL	ug/Kg	
SL-059-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	21	PQL	ug/Kg	J (all detects)
SL-061-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	21	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	16	21	PQL	ug/Kg	
	CHRYSENE	J	0.68	1.9	PQL	ug/Kg	
SL-062-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	15	21	PQL	ug/Kg	J (all detects)
SL-064-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	20	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	7.8	20	PQL	ug/Kg	
	CHRYSENE	J	1.6	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	1.1	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE034 **Laboratory: LL**

EDD Filename: DE034_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-065-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.87	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.3	20	PQL	ug/Kg	
	CHRYSENE	J	0.60	1.8	PQL	ug/Kg	
SL-067-SA5B-SS-0.0-0.5	ANTHRACENE	J	2.0	9.0	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	97	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	6.2	9.0	PQL	ug/Kg	
SL-070-SA5B-SS-0.0-0.5	ACENAPHTHYLENE	J	0.59	2.0	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	21	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	2.0	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.5	21	PQL	ug/Kg	
SL-228-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	25	PQL	ug/Kg	J (all detects)
SL-229-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	J (all detects)
SL-232-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.1	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	21	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	PYRENE	J	0.90	1.9	PQL	ug/Kg	
SL-233-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	0.85	1.9	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.90	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.4	20	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.9	PQL	ug/Kg	
	Di-n-octylphthalate	J	7.1	20	PQL	ug/Kg	
	FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	
	PYRENE	J	1.3	1.9	PQL	ug/Kg	
SL-299-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.99	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.84	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	21	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	
SL-300-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	11	22	PQL	ug/Kg	

LDC #: 25337F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-4-11
SDG #: DE034 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: M
2nd Reviewer: A

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	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, Zn >4x RPDavg)
VII.	Duplicate Sample Analysis	N	DUP (Sb, Hg, Se, Tl, Zr < 5x RL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (V)
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: SO1

1	SL-017-SA5C-SB-4.0-5.0	11	SL-232-SA5B-SS-0.0-0.5	21	(X3) MSD 1 DUP	31	
2	SL-017-SA5C-SB-9.0-10.0	12	SL-233-SA5B-SS-0.0-0.5	22		32	
3	SL-008-SA5B-SS-0.0-0.5	13	SL-299-SA5B-SS-0.0-0.5	23		33	
4	SL-009-SA5B-SS-0.0-0.5	14	SL-300-SA5B-SS-0.0-0.5	24		34	
5	SL-228-SA5B-SS-0.0-0.5	15	SL-067-SA5B-SS-0.0-0.5	25		35	
6	SL-229-SA5B-SS-0.0-0.5	16	SL-059-SA5B-SS-0.0-0.5	26		36	
7	SL-048-SA5B-SS-0.0-0.5	17	SL-065-SA5B-SS-0.0-0.5	27		37	
8	SL-051-SA5B-SS-0.0-0.5	18	SL-061-SA5B-SS-0.0-0.5	28		38	
9	SL-062-SA5B-SS-0.0-0.5	19	SL-070-SA5B-SS-0.0-0.5	29		39	
10	SL-064-SA5B-SS-0.0-0.5	20	(X3) MS	30		40	

Notes: _____

LDC #: 25337F4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: A

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x x (ICPMS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

			Sample Identification															
Analyte	Maximum ICB/CCB* (ug/L)	Blank Action Limit	3	4	5	6	7	8	10	11	12	18	19					
Sb	0.42	0.42	0.15	0.083	0.097	0.10	0.070	0.13	0.077	0.084	0.084	0.070	0.079					

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE034
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6162905BKG Serial Dilution Lab Sample ID: 6162905L
Batch ID(s): P34908C, P34926C
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		86114.4700		79924.2500		7		P
Antimony	121	0.7182	B	1.5000	U	100		MS
Arsenic	75	20.9200		19.0950		9		MS
Barium	137	483.2000		457.1000		5		MS
Beryllium	9	1.3750		1.4635	B	6		MS
Boron		84.2000		106.2500	B	26		P
Cadmium	111	0.8659		1.1120	B	28		MS
Calcium		408833.5400		411099.6000		1		P
Chromium	52	77.0900		77.1500		0		MS
Cobalt	59	25.7300		26.7050		4		MS
Copper	63	53.9300		55.4000		3		MS
Iron		144430.1200		137842.1500		5		P
Lead	208	24.7300		23.0750		7		MS
Lithium		123.7900		131.8500		7		P
Magnesium		41744.7400		41060.3000		2		P
Manganese		2157.4900		2216.2500		3		P
Molybdenum	98	3.9320		3.5825		9		MS
Nickel	60	44.7900		47.8400		7		MS
Phosphorus		5203.2200		5206.7500		0		P
Potassium		22569.7900		22729.5500		1		P
Selenium	78	0.6120	B	1.0000	U	100		MS
Silver	107	0.2955	B	0.3641	B	23		MS
Sodium		2883.9500		2747.1500	B	5		P
Strontium		2661.0700		2615.1000		2		P
Thallium	203	0.8330		0.7500	U	100		MS
Tin		15.6100	B	50.0000	U	100		P
Vanadium	51	124.8000		147.4500		18	E	MS
Zinc	66	378.7000		343.3500		9		MS
Zirconium		13.3100	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

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	6162947	N	3050B	6010B	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3050B	6020	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3060A	7199	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3550B	8081A	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3550B	8082	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3550B	8151A	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3550B	8270C	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	3550B	8270C SIM	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	Gen Prep	9045M	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	METHOD	300.0	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	METHOD	314.0	III
10-Dec-2010	SL-290-SA5B-SS-0.0-0.5	6162947	N	METHOD	7471A	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3050B	6010B	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3050B	6020	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3060A	7199	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3550B	8081A	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3550B	8082	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3550B	8151A	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3550B	8270C	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	3550B	8270C SIM	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	E300.0	314.0	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	Gen Prep	9045M	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	METHOD	300.0	III
10-Dec-2010	DUP03-SA5B-QC-121010	6162948	FD	METHOD	7471A	III
10-Dec-2010	DUP03-SA5B-QC-121010DUP	P162948D270129A	DUP	E300.0	314.0	III
10-Dec-2010	DUP03-SA5B-QC-121010MS	P162948R270153A	MS	E300.0	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
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3050B	6010B	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3050B	6020	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3060A	7199	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3546	1625C	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3550B	8015B	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3550B	8015M	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3550B	8082	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3550B	8270C	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	3550B	8270C SIM	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	5035	8015M	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	5035	8260B	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	5035	8260B SIM	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	8330	8330A	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	Gen Prep	9045M	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	300.0	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	314.0	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	7471A	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	8015B	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	8015M	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	8315A	III
10-Dec-2010	SL-011-SA5C-SB-4.0-5.0	6162941	N	METHOD	9012B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3050B	6010B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3050B	6020	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3060A	7199	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3550B	8081A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	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
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3550B	8151A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3550B	8270C	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	3550B	8270C SIM	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	Gen Prep	9045M	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	METHOD	300.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	METHOD	314.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5	6162943	N	METHOD	7471A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3050B	6010B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3050B	6020	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3060A	7199	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3550B	8081A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3550B	8082	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3550B	8151A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3550B	8270C	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	3550B	8270C SIM	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	METHOD	300.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	METHOD	314.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	6162944	MS	METHOD	7471A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3050B	6010B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3050B	6020	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3550B	8081A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3550B	8082	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3550B	8151A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3550B	8270C	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	MSD	3550B	8270C SIM	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MSD	6162945	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
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	6162946	DUP	3050B	6010B	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	6162946	DUP	3050B	6020	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	6162946	DUP	3060A	7199	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	6162946	DUP	Gen Prep	9045M	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	6162946	DUP	METHOD	300.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	6162946	DUP	METHOD	314.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP.	6162946	DUP	METHOD	7471A	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5DUP	P162943D270019A	DUP	METHOD	300.0	III
10-Dec-2010	SL-288-SA5B-SS-0.0-0.5MS	P162943R270033A	MS	METHOD	300.0	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3050B	6010B	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3050B	6020	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3060A	7199	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3546	1625C	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3550B	8015B	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3550B	8015M	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3550B	8082	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3550B	8270C	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	3550B	8270C SIM	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	5035	8015M	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	5035	8260B	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	5035	8260B SIM	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	8330	8330A	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	Gen Prep	9045M	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	METHOD	300.0	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	METHOD	314.0	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	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
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	METHOD	8015B	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	METHOD	8015M	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	METHOD	8315A	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0	6162942	N	METHOD	9012B	III
10-Dec-2010	SL-011-SA5C-SB-9.0-10.0MS	P162942R321751A	MS	3550B	8015M	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3050B	6010B	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3050B	6020	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3060A	7199	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3550B	8081A	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3550B	8082	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3550B	8151A	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3550B	8270C	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	3550B	8270C SIM	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	Gen Prep	314.0	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	Gen Prep	9045M	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	METHOD	300.0	III
10-Dec-2010	SL-287-SA5B-SS-0.0-0.5	6162956	N	METHOD	7471A	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3050B	6010B	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3050B	6020	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3060A	7199	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3546	1625C	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3550B	8015B	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3550B	8015M	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3550B	8082	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	3550B	8270C	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	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
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	5035	8015M	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	5035	8260B	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	5035	8260B SIM	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	8330	8330A	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	E300.0	314.0	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	Gen Prep	9045M	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	METHOD	300.0	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	METHOD	7471A	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	METHOD	8015B	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	METHOD	8015M	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	METHOD	8315A	III
10-Dec-2010	SL-010-SA5C-SB-4.0-5.0	6162949	N	METHOD	9012B	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3050B	6010B	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3050B	6020	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3060A	7199	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3550B	8081A	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3550B	8082	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3550B	8151A	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3550B	8270C	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	3550B	8270C SIM	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	Gen Prep	314.0	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	Gen Prep	9045M	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	METHOD	300.0	III
10-Dec-2010	SL-235-SA5B-SS-0.0-0.5	6162955	N	METHOD	7471A	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3050B	6010B	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	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-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3060A	7199	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3546	1625C	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3550B	8015B	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3550B	8015M	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3550B	8082	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3550B	8270C	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	3550B	8270C SIM	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	5035	8015M	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	5035	8260B	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	5035	8260B SIM	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	8330	8330A	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	E300.0	314.0	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	Gen Prep	9045M	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	METHOD	300.0	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	METHOD	7471A	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	METHOD	8015B	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	METHOD	8015M	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	METHOD	8315A	III
10-Dec-2010	SL-010-SA5C-SB-9.0-10.0	6162950	N	METHOD	9012B	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3050B	6010B	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3050B	6020	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3060A	7199	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3550B	8081A	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3550B	8082	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3550B	8151A	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	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-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	3550B	8270C SIM	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	E300.0	314.0	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	Gen Prep	9045M	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	METHOD	300.0	III
10-Dec-2010	SL-057-SA5B-SS-0.0-0.5	6162953	N	METHOD	7471A	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3050B	6010B	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3050B	6020	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3060A	7199	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3550B	8081A	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3550B	8082	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3550B	8151A	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3550B	8270C	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	3550B	8270C SIM	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	Gen Prep	314.0	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	Gen Prep	9045M	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	METHOD	300.0	III
10-Dec-2010	SL-234-SA5B-SS-0.0-0.5	6162954	N	METHOD	7471A	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	3050B	6010B	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	3050B	6020	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	3060A	7199	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	3550B	8082	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	3550B	8270C	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	3550B	8270C SIM	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	5035	8260B	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	5035	8260B SIM	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	E300.0	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
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	Gen Prep	9045M	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	METHOD	300.0	III
10-Dec-2010	SL-008-SA5C-SB-4.0-5.0	6162951	N	METHOD	7471A	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	3050B	6010B	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	3050B	6020	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	3060A	7199	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	3550B	8082	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	3550B	8270C	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	3550B	8270C SIM	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	E300.0	314.0	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	Gen Prep	9045M	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	METHOD	300.0	III
10-Dec-2010	SL-008-SA5C-SB-8.0-9.0	6162952	N	METHOD	7471A	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3050B	6010B	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3050B	6020	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3060A	7199	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3546	1625C	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3550B	8015B	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3550B	8015M	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3550B	8082	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3550B	8270C	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	3550B	8270C SIM	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	5035	8015M	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	5035	8260B	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	5035	8260B SIM	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	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
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	E300.0	314.0	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	Gen Prep	9045M	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	METHOD	300.0	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	METHOD	7471A	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	METHOD	8015B	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	METHOD	8015M	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	METHOD	8315A	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0	6162959	N	METHOD	9012B	III
10-Dec-2010	SL-009-SA5C-SB-4.0-5.0DUP	P162959D291400A	DUP	Gen Prep	9045M	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3050B	6010B	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3050B	6020	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3060A	7199	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3546	1625C	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3550B	8015B	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3550B	8015M	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3550B	8082	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3550B	8270C	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	3550B	8270C SIM	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	5035	8015M	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	5035	8260B	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	5035	8260B SIM	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	8330	8330A	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	E300.0	314.0	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	Gen Prep	9045M	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	METHOD	300.0	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	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
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	METHOD	8015B	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	METHOD	8015M	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	METHOD	8315A	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0	6162960	N	METHOD	9012B	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0DU	P162960D270338B	DUP	METHOD	300.0	III
10-Dec-2010	SL-009-SA5C-SB-9.0-10.0MS	P162960R270352B	MS	METHOD	300.0	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3050B	6010B	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3050B	6020	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3060A	7199	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3546	1625C	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3550B	8015B	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3550B	8015M	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3550B	8082	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3550B	8270C	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	3550B	8270C SIM	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	5035	8015M	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	5035	8260B	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	5035	8260B SIM	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	8330	8330A	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	Gen Prep	314.0	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	Gen Prep	9045M	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	METHOD	300.0	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	METHOD	7471A	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	METHOD	8015B	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	METHOD	8015M	III
10-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	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-Dec-2010	SL-005-SA5C-SB-4.0-5.0	6162957	N	METHOD	9012B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3050B	6010B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3050B	6020	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3060A	7199	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3546	1625C	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3550B	8015B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3550B	8015M	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3550B	8082	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3550B	8270C	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	3550B	8270C SIM	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	5035	8015M	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	5035	8260B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	5035	8260B SIM	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	8330	8330A	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	E300.0	314.0	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	Gen Prep	9045M	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	METHOD	300.0	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	METHOD	7471A	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	METHOD	8015B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	METHOD	8015M	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	METHOD	8315A	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0	6162958	N	METHOD	9012B	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0DU	P162958D270642B	DUP	E300.0	314.0	III
10-Dec-2010	SL-005-SA5C-SB-9.0-10.0MS	P162958R270706B	MS	E300.0	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*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **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
FLUORIDE	2.6		0.92	MDL	1.2	PQL	mg/Kg	J	Q

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
FLUORIDE	6.7		0.88	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	5.4		0.86	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	5.3		0.89	MDL	1.1	PQL	mg/Kg	J	Q

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
Nitrate-NO3	4.8		0.91	MDL	1.7	PQL	mg/Kg	J	Q

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
Nitrate-NO3	0.88	U	0.88	MDL	1.6	PQL	mg/Kg	UJ	Q

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
Nitrate-NO3	0.88	U	0.88	MDL	1.7	PQL	mg/Kg	UJ	Q

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
Nitrate-NO3	1.1	J	0.87	MDL	1.6	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

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
FLUORIDE	3.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	2.4		0.87	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	0.86	U	0.86	MDL	1.1	PQL	mg/Kg	UJ	Q

Method Category: GENCHEM

Method: 9012B **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
CYANIDE	0.21	U	0.21	MDL	0.57	PQL	mg/Kg	UJ	H

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
CYANIDE	0.19	U	0.19	MDL	0.54	PQL	mg/Kg	UJ	H

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
CYANIDE	0.18	U	0.18	MDL	0.51	PQL	mg/Kg	UJ	H

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
CYANIDE	0.20	U	0.20	MDL	0.55	PQL	mg/Kg	UJ	H

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 9012B **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
CYANIDE	0.20	U	0.20	MDL	0.55	PQL	mg/Kg	UJ	H

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
CYANIDE	0.19	U	0.19	MDL	0.53	PQL	mg/Kg	UJ	H

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
CYANIDE	0.19	U	0.19	MDL	0.54	PQL	mg/Kg	UJ	H

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
CYANIDE	0.19	U	0.19	MDL	0.53	PQL	mg/Kg	UJ	H

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.03	J	0.882	MDL	5.25	PQL	mg/Kg	J	Z

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	291		0.395	MDL	1.04	PQL	mg/Kg	J	Q

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
ALUMINUM	3240		5.28	MDL	21.0	PQL	mg/Kg	J	E
BORON	2.88	J	0.935	MDL	5.25	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **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
CALCIUM	8080		6.44	MDL	21.0	PQL	mg/Kg	J	E
MANGANESE	105		0.0819	MDL	0.525	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	357		0.588	MDL	10.5	PQL	mg/Kg	J	Q
SODIUM	54.3	J	39.2	MDL	105	PQL	mg/Kg	J	Z
TIN	1.80	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 3:29:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.74	J	0.940	MDL	5.59	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 3:29:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1430		0.438	MDL	1.15	PQL	mg/Kg	J	Q

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
ALUMINUM	26300		5.63	MDL	22.4	PQL	mg/Kg	J	E
CALCIUM	54500		6.86	MDL	22.4	PQL	mg/Kg	J	E
MANGANESE	354		0.0872	MDL	0.559	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	465		0.626	MDL	11.2	PQL	mg/Kg	J	Q
TIN	2.19	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.06	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1100		0.402	MDL	1.06	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
ALUMINUM	12700		5.37	MDL	21.4	PQL	mg/Kg	J	E
CALCIUM	3520		6.55	MDL	21.4	PQL	mg/Kg	J	E
MANGANESE	229		0.0833	MDL	0.534	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	395		0.598	MDL	10.7	PQL	mg/Kg	J	Q
TIN	1.92	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	3.77	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1710		0.416	MDL	1.10	PQL	mg/Kg	J	Q

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
ALUMINUM	29800		5.73	MDL	22.8	PQL	mg/Kg	J	E
CALCIUM	9770		6.98	MDL	22.8	PQL	mg/Kg	J	E
MANGANESE	350		0.0889	MDL	0.570	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	253		0.638	MDL	11.4	PQL	mg/Kg	J	Q
TIN	2.70	J	1.14	MDL	11.4	PQL	mg/Kg	U	B

Sample ID: SL-008-SA5C-SB-8.0-9.0 *Collected:* 12/10/2010 12:22:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1210		0.412	MDL	1.08	PQL	mg/Kg	J	Q

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
ALUMINUM	22600		5.45	MDL	21.7	PQL	mg/Kg	J	E
BORON	5.01	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
CALCIUM	1510		6.65	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	165		0.0846	MDL	0.542	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	181		0.607	MDL	10.8	PQL	mg/Kg	J	Q
SODIUM	89.6	J	40.4	MDL	108	PQL	mg/Kg	J	Z
TIN	2.74	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.67	J	0.881	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1290		0.398	MDL	1.05	PQL	mg/Kg	J	Q

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
ALUMINUM	11400		5.27	MDL	21.0	PQL	mg/Kg	J	E
CALCIUM	3550		6.43	MDL	21.0	PQL	mg/Kg	J	E
MANGANESE	273		0.0818	MDL	0.524	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	437		0.587	MDL	10.5	PQL	mg/Kg	J	Q
TIN	2.06	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.33	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1230		0.417	MDL	1.10	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 **Laboratory:** LL

EDD Filename: PrepDE035_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
ALUMINUM	15200		5.46	MDL	21.7	PQL	mg/Kg	J	E
CALCIUM	3850		6.66	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	282		0.0847	MDL	0.543	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	324		0.608	MDL	10.9	PQL	mg/Kg	J	Q
TIN	2.46	J	1.09	MDL	10.9	PQL	mg/Kg	U	B

Sample ID: SL-010-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 10:54:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.94	J	0.940	MDL	5.60	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 10:54:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1330		0.417	MDL	1.10	PQL	mg/Kg	J	Q

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
ALUMINUM	18200		5.63	MDL	22.4	PQL	mg/Kg	J	E
CALCIUM	6100		6.86	MDL	22.4	PQL	mg/Kg	J	E
MANGANESE	310		0.0873	MDL	0.560	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	338		0.627	MDL	11.2	PQL	mg/Kg	J	Q
TIN	2.55	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-010-SA5C-SB-9.0-10.0 ***Collected:*** 12/10/2010 11:03:00 ***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	0.911	MDL	5.42	PQL	mg/Kg	J	Z

Sample ID: SL-010-SA5C-SB-9.0-10.0 ***Collected:*** 12/10/2010 11:03:00 ***Analysis Type:*** REA3 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1220		0.412	MDL	1.08	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
ALUMINUM	15700		5.45	MDL	21.7	PQL	mg/Kg	J	E
CALCIUM	3780		6.65	MDL	21.7	PQL	mg/Kg	J	E
MANGANESE	259		0.0846	MDL	0.542	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	389		0.607	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.58	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-011-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 9:39:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	0.930	J	0.906	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 9:39:00 **Analysis Type:** REA3 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1170		0.418	MDL	1.10	PQL	mg/Kg	J	Q

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
ALUMINUM	14500		5.43	MDL	21.6	PQL	mg/Kg	J	E
CALCIUM	3650		6.61	MDL	21.6	PQL	mg/Kg	J	E
MANGANESE	253		0.0841	MDL	0.539	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	296		0.604	MDL	10.8	PQL	mg/Kg	J	Q
TIN	2.43	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SL-011-SA5C-SB-9.0-10.0 **Collected:** 12/10/2010 9:45:00 **Analysis Type:** REA3 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1120		0.411	MDL	1.08	PQL	mg/Kg	J	Q

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
ALUMINUM	11400		5.23	MDL	20.8	PQL	mg/Kg	J	E
CALCIUM	3630		6.38	MDL	20.8	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
MANGANESE	251		0.0812	MDL	0.520	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	376		0.583	MDL	10.4	PQL	mg/Kg	J	Q
TIN	2.21	J	1.04	MDL	10.4	PQL	mg/Kg	U	B

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.09	J	0.945	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
CALCIUM	67300		13.8	MDL	45.0	PQL	mg/Kg	J	E

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:20:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1450		0.432	MDL	1.14	PQL	mg/Kg	J	Q

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
ALUMINUM	24900		5.66	MDL	22.5	PQL	mg/Kg	J	E
MANGANESE	345		0.0877	MDL	0.562	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	560		0.630	MDL	11.2	PQL	mg/Kg	J	Q
TIN	2.41	J	1.12	MDL	11.2	PQL	mg/Kg	U	B

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:20:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.78	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:20:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1340		0.416	MDL	1.09	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
ALUMINUM	15400		5.40	MDL	21.5	PQL	mg/Kg	J	E
CALCIUM	5650		6.58	MDL	21.5	PQL	mg/Kg	J	E
MANGANESE	274		0.0837	MDL	0.536	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	694		0.601	MDL	10.7	PQL	mg/Kg	J	Q
SODIUM	106	J	40.0	MDL	107	PQL	mg/Kg	J	Z
TIN	2.16	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.09	J	0.883	MDL	5.25	PQL	mg/Kg	J	Z

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	1390		0.411	MDL	1.08	PQL	mg/Kg	J	Q

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
ALUMINUM	13700		5.29	MDL	21.0	PQL	mg/Kg	J	E
CALCIUM	9690		6.44	MDL	21.0	PQL	mg/Kg	J	E
MANGANESE	289		0.0820	MDL	0.525	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	503		0.588	MDL	10.5	PQL	mg/Kg	J	Q
SODIUM	86.4	J	39.2	MDL	105	PQL	mg/Kg	J	Z
TIN	2.31	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
Zirconium	1.22	J	0.890	MDL	5.30	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 **Laboratory:** LL

EDD Filename: PrepDE035_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:55:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	821		0.395	MDL	1.04	PQL	mg/Kg	J	Q

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
ALUMINUM	8050		5.33	MDL	21.2	PQL	mg/Kg	J	E
BORON	4.78	J	0.943	MDL	5.30	PQL	mg/Kg	J	Z
CALCIUM	4300		6.50	MDL	21.2	PQL	mg/Kg	J	E
MANGANESE	215		0.0827	MDL	0.530	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	362		0.594	MDL	10.6	PQL	mg/Kg	J	Q
SODIUM	66.7	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	1.99	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:40:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	2.52	J	0.852	MDL	5.07	PQL	mg/Kg	J	Z

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:40:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	310		0.378	MDL	0.995	PQL	mg/Kg	J	Q

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
ALUMINUM	3760		5.10	MDL	20.3	PQL	mg/Kg	J	E
BORON	3.02	J	0.903	MDL	5.07	PQL	mg/Kg	J	Z
CALCIUM	7300		6.22	MDL	20.3	PQL	mg/Kg	J	E
MANGANESE	104		0.0791	MDL	0.507	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	320		0.568	MDL	10.1	PQL	mg/Kg	J	Q
SODIUM	51.4	J	37.8	MDL	101	PQL	mg/Kg	J	Z
TIN	1.85	J	1.01	MDL	10.1	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-290-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 8:45:00 **Analysis Type:** REA **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	4.03	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-290-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 8:45:00 **Analysis Type:** REA3 **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TITANIUM	869		0.388	MDL	1.02	PQL	mg/Kg	J	Q

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
ALUMINUM	10200		5.40	MDL	21.5	PQL	mg/Kg	J	E
CALCIUM	4250		6.58	MDL	21.5	PQL	mg/Kg	J	E
MANGANESE	171		0.0837	MDL	0.536	PQL	mg/Kg	J	Q, E, E
PHOSPHORUS	603		0.601	MDL	10.7	PQL	mg/Kg	J	Q
TIN	1.46	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 **Collected:** 12/10/2010 9:05:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z, Q

Sample ID: DUP03-SA5B-QC-121010 **Collected:** 12/10/2010 9:05:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.826		0.0515	MDL	0.103	PQL	mg/Kg	J	Q, E

Sample ID: DUP03-SA5B-QC-121010 **Collected:** 12/10/2010 9:05:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	24.2		0.111	MDL	0.412	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: DE035 **Laboratory:** LL

EDD Filename: PrepDE035_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 ***Collected:*** 12/10/2010 9:05:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0618	MDL	0.206	PQL	mg/Kg	UJ	Q, B, FD
ARSENIC	3.76		0.0618	MDL	0.412	PQL	mg/Kg	J	Q
BERYLLIUM	0.149		0.0165	MDL	0.103	PQL	mg/Kg	J	Q
CADMIUM	0.110		0.0371	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	13.7		0.124	MDL	0.412	PQL	mg/Kg	J	Q, E
COBALT	2.52		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E
COPPER	4.05		0.0680	MDL	0.412	PQL	mg/Kg	J	Q, E
LEAD	5.42		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, A, FD
NICKEL	8.00		0.103	MDL	0.412	PQL	mg/Kg	J	Q, E
THALLIUM	0.0571	J	0.0309	MDL	0.103	PQL	mg/Kg	J	Z, Q
VANADIUM	16.5		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, E
ZINC	15.6		0.577	MDL	3.09	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 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	0.284	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z, Q

Sample ID: SL-005-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 3:29:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.550		0.0554	MDL	0.111	PQL	mg/Kg	J	Q, E

Sample ID: SL-005-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 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	175		0.120	MDL	0.443	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 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	0.267		0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.78		0.0665	MDL	0.443	PQL	mg/Kg	J	Q
BERYLLIUM	0.799		0.0177	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.375		0.0399	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 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
CHROMIUM	37.4		0.133	MDL	0.443	PQL	mg/Kg	J	Q, E
COBALT	10.8		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	16.9		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, E
LEAD	12.5		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, A
NICKEL	21.0		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E
SILVER	0.0434	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.468		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	77.0		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E
ZINC	95.8		0.620	MDL	3.32	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.20		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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	127		0.116	MDL	0.431	PQL	mg/Kg	J	Q

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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	0.143	J	0.0647	MDL	0.216	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.78		0.0647	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	0.576		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.324		0.0388	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	22.4		0.129	MDL	0.431	PQL	mg/Kg	J	Q, E
COBALT	6.99		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	11.6		0.0712	MDL	0.431	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-005-SA5C-SB-9.0-10.0 **Collected:** 12/10/2010 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
LEAD	10.1		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, A
NICKEL	12.6		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E
SILVER	0.0316	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.366		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	46.4		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, E
ZINC	129		0.604	MDL	3.24	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 12:18:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHROMIUM	29.9		0.137	MDL	0.456	PQL	mg/Kg	J	Q, E
COBALT	7.40		0.0228	MDL	0.114	PQL	mg/Kg	J	Q, E
COPPER	10.6		0.0752	MDL	0.456	PQL	mg/Kg	J	Q, E
NICKEL	14.9		0.114	MDL	0.456	PQL	mg/Kg	J	Q, E
VANADIUM	60.3		0.0251	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-008-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 12:18:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.307	J	0.0456	MDL	0.456	PQL	mg/Kg	J	Z, Q

Sample ID: SL-008-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 12:18:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.586		0.0570	MDL	0.114	PQL	mg/Kg	J	Q, E

Sample ID: SL-008-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 12:18:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	158		0.123	MDL	0.456	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 12:18:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.237		0.0684	MDL	0.228	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.76		0.0684	MDL	0.456	PQL	mg/Kg	J	Q
BERYLLIUM	0.870		0.0182	MDL	0.114	PQL	mg/Kg	J	Q
CADMIUM	0.247		0.0410	MDL	0.114	PQL	mg/Kg	J	Q
LEAD	11.6		0.0118	MDL	0.228	PQL	mg/Kg	J	Q, A
SILVER	0.0421	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z, Q
THALLIUM	0.484		0.0342	MDL	0.114	PQL	mg/Kg	J	Q
ZINC	99.1		0.638	MDL	3.42	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5C-SB-8.0-9.0 *Collected:* 12/10/2010 12:22:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.215	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z, Q

Sample ID: SL-008-SA5C-SB-8.0-9.0 *Collected:* 12/10/2010 12:22:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.05		0.0532	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-008-SA5C-SB-8.0-9.0 *Collected:* 12/10/2010 12:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	63.5		0.115	MDL	0.425	PQL	mg/Kg	J	Q

Sample ID: SL-008-SA5C-SB-8.0-9.0 *Collected:* 12/10/2010 12:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.150	J	0.0638	MDL	0.213	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.38		0.0638	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.602		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.0604	J	0.0383	MDL	0.106	PQL	mg/Kg	J	Z, Q
CHROMIUM	16.6		0.128	MDL	0.425	PQL	mg/Kg	J	Q, E
COBALT	3.54		0.0213	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	5.42		0.0702	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	6.69		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, A
NICKEL	7.96		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-008-SA5C-SB-8.0-9.0 **Collected:** 12/10/2010 12:22:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.168		0.0128	MDL	0.106	PQL	mg/Kg	J	Q
THALLIUM	0.326		0.0319	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	35.2		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	53.7		0.595	MDL	3.19	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 2:19:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.220	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z, Q

Sample ID: SL-009-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 2:19:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.548		0.0529	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-009-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 2:19:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.114	MDL	0.424	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5C-SB-4.0-5.0 **Collected:** 12/10/2010 2:19:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.180	J	0.0635	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.23		0.0635	MDL	0.424	PQL	mg/Kg	J	Q
BERYLLIUM	0.618		0.0169	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.137		0.0381	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	26.0		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E
COBALT	8.24		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	11.1		0.0699	MDL	0.424	PQL	mg/Kg	J	Q, E
LEAD	7.98		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
NICKEL	12.7		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E
SILVER	0.0214	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.354		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	60.7		0.0233	MDL	0.106	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	85.9		0.593	MDL	3.18	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0957	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z, Q

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.628		0.0543	MDL	0.109	PQL	mg/Kg	J	Q, E

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.7		0.117	MDL	0.434	PQL	mg/Kg	J	Q

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.123	J	0.0652	MDL	0.217	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.62		0.0652	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.522		0.0174	MDL	0.109	PQL	mg/Kg	J	Q
CADMIUM	0.167		0.0391	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	15.6		0.130	MDL	0.434	PQL	mg/Kg	J	Q, E
COBALT	5.86		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	7.10		0.0717	MDL	0.434	PQL	mg/Kg	J	Q, E
LEAD	5.85		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
NICKEL	9.46		0.109	MDL	0.434	PQL	mg/Kg	J	Q, E
SILVER	0.0204	J	0.0130	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.286		0.0326	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	33.6		0.0239	MDL	0.109	PQL	mg/Kg	J	Q, E
ZINC	61.9		0.608	MDL	3.26	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.178	J	0.0448	MDL	0.448	PQL	mg/Kg	J	Z, Q

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.952		0.0560	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	139		0.121	MDL	0.448	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.152	J	0.0672	MDL	0.224	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.89		0.0672	MDL	0.448	PQL	mg/Kg	J	Q
BERYLLIUM	0.815		0.0179	MDL	0.112	PQL	mg/Kg	J	Q
CADMIUM	0.257		0.0403	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	27.2		0.134	MDL	0.448	PQL	mg/Kg	J	Q, E
COBALT	7.94		0.0224	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	11.8		0.0739	MDL	0.448	PQL	mg/Kg	J	Q, E
LEAD	9.92		0.0116	MDL	0.224	PQL	mg/Kg	J	Q, A
NICKEL	16.0		0.112	MDL	0.448	PQL	mg/Kg	J	Q, E
SILVER	0.0461	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.417		0.0336	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	56.8		0.0246	MDL	0.112	PQL	mg/Kg	J	Q, E
ZINC	87.5		0.627	MDL	3.36	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.160	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.42		0.0542	MDL	0.108	PQL	mg/Kg	J	Q, E

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	91.7		0.117	MDL	0.434	PQL	mg/Kg	J	Q

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.107	J	0.0651	MDL	0.217	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.61		0.0651	MDL	0.434	PQL	mg/Kg	J	Q
BERYLLIUM	0.519		0.0174	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.166		0.0390	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	19.7		0.130	MDL	0.434	PQL	mg/Kg	J	Q, E
COBALT	5.67		0.0217	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	7.73		0.0716	MDL	0.434	PQL	mg/Kg	J	Q, E
LEAD	6.22		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, A
NICKEL	11.1		0.108	MDL	0.434	PQL	mg/Kg	J	Q, E
SILVER	0.0196	J	0.0130	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.268		0.0325	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	35.1		0.0239	MDL	0.108	PQL	mg/Kg	J	Q, E
ZINC	65.3		0.607	MDL	3.25	PQL	mg/Kg	J	Q

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.213	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z, Q

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.860		0.0539	MDL	0.108	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	129		0.116	MDL	0.431	PQL	mg/Kg	J	Q

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.219		0.0647	MDL	0.216	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.91		0.0647	MDL	0.431	PQL	mg/Kg	J	Q
BERYLLIUM	0.804		0.0173	MDL	0.108	PQL	mg/Kg	J	Q
CADMIUM	0.176		0.0388	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	23.9		0.129	MDL	0.431	PQL	mg/Kg	J	Q, E
COBALT	7.33		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	10.5		0.0712	MDL	0.431	PQL	mg/Kg	J	Q, E
LEAD	9.04		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, A
NICKEL	13.8		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E
SILVER	0.0422	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.424		0.0324	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	50.2		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, E
ZINC	83.8		0.604	MDL	3.24	PQL	mg/Kg	J	Q

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 9:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z, Q

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 9:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.520		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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
BARIUM	104		0.115	MDL	0.424	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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	0.122	J	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	4.44		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
BERYLLIUM	0.465		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.125		0.0382	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	14.7		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E
COBALT	5.78		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	8.60		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E
LEAD	5.62		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
NICKEL	9.10		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E
SILVER	0.0214	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.288		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	39.0		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	70.2		0.594	MDL	3.18	PQL	mg/Kg	J	Q

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.231	J	0.0450	MDL	0.450	PQL	mg/Kg	J	Z, Q

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:20:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.610		0.0562	MDL	0.112	PQL	mg/Kg	J	Q, E

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.121	MDL	0.450	PQL	mg/Kg	J	Q

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.148	J	0.0675	MDL	0.225	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.10		0.0675	MDL	0.450	PQL	mg/Kg	J	Q
BERYLLIUM	0.698		0.0180	MDL	0.112	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-057-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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
CADMIUM	0.409		0.0405	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	31.7		0.135	MDL	0.450	PQL	mg/Kg	J	Q, E
COBALT	10.1		0.0225	MDL	0.112	PQL	mg/Kg	J	Q, E
COPPER	14.4		0.0742	MDL	0.450	PQL	mg/Kg	J	Q, E
LEAD	12.1		0.0117	MDL	0.225	PQL	mg/Kg	J	Q, A
NICKEL	18.8		0.112	MDL	0.450	PQL	mg/Kg	J	Q, E
SILVER	0.0416	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z, Q
THALLIUM	0.384		0.0337	MDL	0.112	PQL	mg/Kg	J	Q
VANADIUM	63.3		0.0247	MDL	0.112	PQL	mg/Kg	J	Q, E
ZINC	85.4		0.630	MDL	3.37	PQL	mg/Kg	J	Q

Sample ID: SL-234-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 11:20:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
THALLIUM	0.207		0.0319	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-234-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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	0.141	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z, Q

Sample ID: SL-234-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 11:20:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.04		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-234-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 11:20:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	127		0.115	MDL	0.425	PQL	mg/Kg	J	Q

Sample ID: SL-234-SA5B-SS-0.0-0.5 **Collected:** 12/10/2010 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	0.119	J	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
ARSENIC	5.03		0.0637	MDL	0.425	PQL	mg/Kg	J	Q
BERYLLIUM	0.555		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.263		0.0382	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	22.8		0.127	MDL	0.425	PQL	mg/Kg	J	Q, E
COBALT	6.31		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	10.5		0.0701	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	7.10		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
NICKEL	14.5		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E
SILVER	0.0378	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
VANADIUM	43.0		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	77.9		0.595	MDL	3.19	PQL	mg/Kg	J	Q

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.110	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z, Q

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.578		0.0531	MDL	0.106	PQL	mg/Kg	J	Q, E

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	109		0.115	MDL	0.424	PQL	mg/Kg	J	Q

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.186	J	0.0637	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.20		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
BERYLLIUM	0.543		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.193		0.0382	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	21.6		0.127	MDL	0.424	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	6.24		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	11.1		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E
LEAD	8.34		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
NICKEL	13.9		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E
SILVER	0.0302	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.341		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	44.5		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	91.5		0.594	MDL	3.18	PQL	mg/Kg	J	Q

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0751	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z, Q

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 9:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.397		0.0525	MDL	0.105	PQL	mg/Kg	J	Q, E

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BARIUM	67.7		0.113	MDL	0.420	PQL	mg/Kg	J	Q

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.0875	J	0.0630	MDL	0.210	PQL	mg/Kg	UJ	Q, B
ARSENIC	3.09		0.0630	MDL	0.420	PQL	mg/Kg	J	Q
BERYLLIUM	0.335		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.206		0.0378	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	11.4		0.126	MDL	0.420	PQL	mg/Kg	J	Q, E
COBALT	3.57		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	5.20		0.0693	MDL	0.420	PQL	mg/Kg	J	Q, E
LEAD	5.57		0.0109	MDL	0.210	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
NICKEL	7.07		0.105	MDL	0.420	PQL	mg/Kg	J	Q, E
SILVER	0.0148	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.217		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	22.9		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, E
ZINC	59.8		0.588	MDL	3.15	PQL	mg/Kg	J	Q

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
SELENIUM	0.193	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z, Q

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
MOLYBDENUM	0.841		0.0512	MDL	0.102	PQL	mg/Kg	J	Q, E

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BARIUM	21.9		0.111	MDL	0.410	PQL	mg/Kg	J	Q

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	0.366		0.0615	MDL	0.205	PQL	mg/Kg	UJ	Q, B, FD
ARSENIC	3.22		0.0615	MDL	0.410	PQL	mg/Kg	J	Q
BERYLLIUM	0.161		0.0164	MDL	0.102	PQL	mg/Kg	J	Q
CADMIUM	0.0987	J	0.0369	MDL	0.102	PQL	mg/Kg	J	Z, Q
CHROMIUM	13.2		0.123	MDL	0.410	PQL	mg/Kg	J	Q, E
COBALT	2.34		0.0205	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	3.30		0.0676	MDL	0.410	PQL	mg/Kg	J	Q, E
LEAD	1.78		0.0107	MDL	0.205	PQL	mg/Kg	J	Q, A, FD
NICKEL	7.44		0.102	MDL	0.410	PQL	mg/Kg	J	Q, E
THALLIUM	0.0604	J	0.0307	MDL	0.102	PQL	mg/Kg	J	Z, Q
VANADIUM	15.3		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
ZINC	13.0		0.574	MDL	3.07	PQL	mg/Kg	J	Q

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.180	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z, Q

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.37		0.0521	MDL	0.104	PQL	mg/Kg	J	Q, E

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	130		0.113	MDL	0.417	PQL	mg/Kg	J	Q

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.269		0.0625	MDL	0.208	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.66		0.0625	MDL	0.417	PQL	mg/Kg	J	Q
BERYLLIUM	0.288		0.0167	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.232		0.0375	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.125	MDL	0.417	PQL	mg/Kg	J	Q, E
COBALT	5.60		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	9.95		0.0688	MDL	0.417	PQL	mg/Kg	J	Q, E
LEAD	5.21		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A
NICKEL	14.8		0.104	MDL	0.417	PQL	mg/Kg	J	Q, E
SILVER	0.0258	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q
THALLIUM	0.166		0.0313	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	42.1		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	43.4		0.583	MDL	3.13	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **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
HEXAVALENT CHROMIUM	0.30	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z, FD

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
HEXAVALENT CHROMIUM	0.31	J	0.23	MDL	1.2	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.34	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.42	J	0.23	MDL	1.2	PQL	mg/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
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.33	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.0	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS
Method: 7199 **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
HEXAVALENT CHROMIUM	0.29	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

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

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
MERCURY	0.0165	J	0.0031	MDL	0.108	PQL	mg/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
MERCURY	0.0082	J	0.0031	MDL	0.106	PQL	mg/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
MERCURY	0.0186	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

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

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	72.8	J	36.7	MDL	73.3	PQL	ng/Kg	J	Z

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	109		38.1	MDL	76.1	PQL	ng/Kg	J	S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 **Laboratory:** LL

EDD Filename: PrepDE035_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	70.0	J	36.5	MDL	73.0	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 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 (C30-C40)	0.60	J	0.46	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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 (C15-C20)	0.58	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *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

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *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)	0.49	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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 (C21-C30)	8.0		0.43	MDL	1.3	PQL	mg/Kg	J	Q, Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MIREX	0.10	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z, FD

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
MIREX	0.24	U	0.24	MDL	0.36	PQL	ug/Kg	UJ	FD

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *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'-DDT	0.21	J	0.071	MDL	0.36	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *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 1248	0.78	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
AROCLOR 1254	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	FD
AROCLOR 1260	2.1		0.35	MDL	1.8	PQL	ug/Kg	J	FD
Aroclor 5460	1.4	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, FD

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 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 1254	0.86	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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 1248	1.4	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.92	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	1.7	J	1.1	MDL	3.6	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *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 1260	0.49	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *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 1254	0.91	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.93	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.66	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *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	0.44	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *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	0.64	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	1.4	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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 1260	0.48	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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 1260	0.64	J	0.38	MDL	2.0	PQL	ug/Kg	J	Z, S

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	1.3	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	2.1	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.7	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

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
Aroclor 5460	1.9	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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 1248	0.34	U	0.34	MDL	1.8	PQL	ug/Kg	UJ	FD
AROCLOR 1254	1.2	J	0.34	MDL	1.8	PQL	ug/Kg	J	Z, S, FD
AROCLOR 1260	3.8		0.34	MDL	1.8	PQL	ug/Kg	J	S, FD
Aroclor 5460	2.7	J	1.0	MDL	3.4	PQL	ug/Kg	J	Z, S, FD

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.93	U	0.93	MDL	2.8	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

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
2,4-D	1.6	J	1.3	MDL	3.9	PQL	ug/Kg	J	Z
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *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	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	27	J	18	MDL	350	PQL	ug/Kg	J	Z, FD

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	380	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *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	21	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *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	20	J	19	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	20	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *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	21	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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	23	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	21	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BENZO(A)ANTHRACENE	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	21	J	18	MDL	360	PQL	ug/Kg	J	Z
CHRYSENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	21	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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	19	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	17	U	17	MDL	350	PQL	ug/Kg	UJ	FD

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *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	18	MDL	360	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(A)ANTHRACENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(A)PYRENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	1.0	J	0.70	MDL	1.8	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: DUP03-SA5B-QC-121010 *Collected:* 12/10/2010 9:05:00 *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(G,H,I)PERYLENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	FD
CHRYSENE	0.95	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	1.6	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
INDENO(1,2,3-CD)PYRENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	FD
NAPHTHALENE	0.71	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
PHENANTHRENE	0.84	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD
PYRENE	1.3	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z, FD

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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
BENZO(A)ANTHRACENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-008-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 12:18:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.89	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *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	0.81	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.51	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *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(K)FLUORANTHENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	0.75	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: DE035 **Laboratory:** LL

EDD Filename: PrepDE035_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-010-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 10:54:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.3	J	0.38	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
INDENO(1,2,3-CD)PYRENE	0.99	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5C-SB-9.0-10.0 ***Collected:*** 12/10/2010 11:03:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.92	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.84	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	1.2	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.78	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-011-SA5C-SB-4.0-5.0 ***Collected:*** 12/10/2010 9:39:00 ***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(A)ANTHRACENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-9.0-10.0 ***Collected:*** 12/10/2010 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	0.81	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.60	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.74	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-057-SA5B-SS-0.0-0.5 ***Collected:*** 12/10/2010 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
BENZO(B)FLUORANTHENE	0.80	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	0.59	J	0.39	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: DE035 **Laboratory:** LL

EDD Filename: PrepDE035_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-234-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
ANTHRACENE	0.57	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-235-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 11:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.4	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
DIBENZO(A,H)ANTHRACENE	0.99	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.0	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-287-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
ANTHRACENE	0.62	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.97	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.83	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
ANTHRACENE	0.84	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)ANTHRACENE	1.0	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(A)PYRENE	1.5	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	4.1		0.70	MDL	1.7	PQL	ug/Kg	J	FD
BENZO(G,H,I)PERYLENE	1.1	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
CHRYSENE	2.6		0.35	MDL	1.7	PQL	ug/Kg	J	FD
FLUORANTHENE	2.8		0.70	MDL	1.7	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	0.99	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	0.70	U	0.70	MDL	1.7	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-288-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 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
PHENANTHRENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z, FD
PYRENE	2.2		0.70	MDL	1.7	PQL	ug/Kg	J	FD

Sample ID: SL-290-SA5B-SS-0.0-0.5 *Collected:* 12/10/2010 8:45:00 *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	9.1	J	7.2	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	15	J	3.6	MDL	18	PQL	ug/Kg	J	Z

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

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
FORMALDEHYDE	670	J	660	MDL	1600	PQL	ug/Kg	J	Z

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

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 3:29:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	190	J	120	MDL	580	PQL	ug/Kg	J	Z

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	190	J	110	MDL	550	PQL	ug/Kg	J	Z
METHANOL	110	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	180	J	110	MDL	530	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-009-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 2:28:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	190	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	210	J	110	MDL	570	PQL	ug/Kg	J	Z

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	180	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ETHANOL	230	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 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
ETHANOL	200	J	110	MDL	540	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-005-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 3:29:00 *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	0.81	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-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* RES *Dilution:* 0.89

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.4	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: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-005-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 3:39:00 *Analysis Type:* RES *Dilution:* 0.89

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

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
METHYLENE CHLORIDE	1.0	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: SL-009-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 2:19:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.1	J	0.27	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.09	MDL	4.4	PQL	ug/Kg	U	B

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
ACETONE	7.7	J	7.5	MDL	8.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.8	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-010-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 10:54:00 *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	1.6	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-010-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 11:03:00 *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	1.5	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-011-SA5C-SB-4.0-5.0 *Collected:* 12/10/2010 9:39:00 *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	0.94	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.2	PQL	ug/Kg	U	B

Sample ID: SL-011-SA5C-SB-9.0-10.0 *Collected:* 12/10/2010 9:45:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.0	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: PrepDE035_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: DE035 **Laboratory: LL**

EDD Filename: PrepDE035_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: DE035 **Laboratory: LL**

EDD Filename: PrepDE035_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

DE035

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE035 **Laboratory: LL**
EDD Filename: PrepDE035_v1 **eQAPP Name: CDM_SSFL_110509**

Sample ID	Type	Actual	Criteria	Units	Flag
SL-005-SA5C-SB-4.0-5.0 (RES)	Sampling To Analysis	17.00	14.00	DAYS	J(all detects) UJ(all non-detects)
SL-005-SA5C-SB-9.0-10.0 (RES)		17.00	14.00	DAYS	
SL-009-SA5C-SB-4.0-5.0 (RES)		17.00	14.00	DAYS	
SL-009-SA5C-SB-9.0-10.0 (RES)		17.00	14.00	DAYS	
SL-010-SA5C-SB-4.0-5.0 (RES)		17.00	14.00	DAYS	
SL-010-SA5C-SB-9.0-10.0 (RES)		17.00	14.00	DAYS	
SL-011-SA5C-SB-4.0-5.0 (RES)		17.00	14.00	DAYS	
SL-011-SA5C-SB-9.0-10.0 (RES)		17.00	14.00	DAYS	

Method Blank Outlier Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P34908FB221851	12/17/2010 6:51:00 PM	PHOSPHORUS TIN	1.38 mg/Kg 1.13 mg/Kg	DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 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)	TIN	1.80 mg/Kg	1.80U mg/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	TIN	2.19 mg/Kg	2.19U mg/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	TIN	1.92 mg/Kg	1.92U mg/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	TIN	2.70 mg/Kg	2.70U mg/Kg
SL-008-SA5C-SB-8.0-9.0(RES)	TIN	2.74 mg/Kg	2.74U mg/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	TIN	2.06 mg/Kg	2.06U mg/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	TIN	2.21 mg/Kg	2.21U mg/Kg
SL-057-SA5B-SS-0.0-0.5(RES)	TIN	2.41 mg/Kg	2.41U mg/Kg
SL-234-SA5B-SS-0.0-0.5(RES)	TIN	2.16 mg/Kg	2.16U mg/Kg
SL-235-SA5B-SS-0.0-0.5(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-287-SA5B-SS-0.0-0.5(RES)	TIN	1.99 mg/Kg	1.99U mg/Kg
SL-288-SA5B-SS-0.0-0.5(RES)	TIN	1.85 mg/Kg	1.85U mg/Kg
SL-290-SA5B-SS-0.0-0.5(RES)	TIN	1.46 mg/Kg	1.46U mg/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB16B212115A	12/14/2010 9:15:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.22 ug/Kg 1.3 ug/Kg 0.09 ug/Kg	SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0

Method Blank Outlier Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_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-005-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	4.3U ug/Kg
SL-005-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.3U ug/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	3.9U ug/Kg
SL-005-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.12 ug/Kg	3.9U ug/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.6U ug/Kg
SL-008-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.12 ug/Kg	4.6U ug/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-009-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	4.4U ug/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.8 ug/Kg	4.5U ug/Kg
SL-009-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.13 ug/Kg	4.5U ug/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.6 ug/Kg	4.0U ug/Kg
SL-010-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	4.0U ug/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.0U ug/Kg
SL-010-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.12 ug/Kg	4.0U ug/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.94 ug/Kg	4.2U ug/Kg
SL-011-SA5C-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.2U ug/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.0 ug/Kg	4.0U ug/Kg
SL-011-SA5C-SB-9.0-10.0(RES)	TOLUENE	0.09 ug/Kg	4.0U ug/Kg

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLH34B260524	12/22/2010 5:24:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE Di-n-butylphthalate	6.7 ug/Kg 6.1 ug/Kg	DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: DE035_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-288-SA5B-SS-0.0-0.5MSD (SL-288-SA5B-SS-0.0-0.5)	HEPTACHLOR	-	136	13.00-126.00	-	HEPTACHLOR	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-011-SA5C-SB-9.0-10.0MS	EFH (C15-C20)	172	137	49.00-123.00	23 (20.00)	EFH (C15-C20)	J(all detects)
SL-011-SA5C-SB-9.0-10.0MSD	EFH (C21-C30)	799	504	49.00-123.00	29 (20.00)	EFH (C21-C30)	EFH (C30-C40)
(SL-011-SA5C-SB-9.0-10.0)	EFH (C30-C40)	1486	1361	49.00-123.00	-	EFH (C30-C40)	No Qual, >4x

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-288-SA5B-SS-0.0-0.5MS	ARSENIC	183	140	75.00-125.00	-	ARSENIC	
SL-288-SA5B-SS-0.0-0.5MSD	BERYLLIUM	128	-	75.00-125.00	-	BERYLLIUM	
(DUP03-SA5B-QC-121010	CADMIUM	149	136	75.00-125.00	-	CADMIUM	
SL-005-SA5C-SB-4.0-5.0	CHROMIUM	157	-	75.00-125.00	-	CHROMIUM	
SL-005-SA5C-SB-9.0-10.0	COBALT	135	-	75.00-125.00	-	COBALT	
SL-008-SA5C-SB-4.0-5.0	COPPER	137	-	75.00-125.00	-	COPPER	
SL-008-SA5C-SB-8.0-9.0	LEAD	162	137	75.00-125.00	-	LEAD	
SL-009-SA5C-SB-4.0-5.0	NICKEL	144	-	75.00-125.00	-	NICKEL	
SL-009-SA5C-SB-9.0-10.0	SILVER	149	135	75.00-125.00	-	SILVER	
SL-010-SA5C-SB-4.0-5.0	THALLIUM	149	129	75.00-125.00	-	THALLIUM	J(all detects)
SL-010-SA5C-SB-9.0-10.0	VANADIUM	168	140	75.00-125.00	-	VANADIUM	
SL-011-SA5C-SB-4.0-5.0	ZINC	178	143	75.00-125.00	-	ZINC	
SL-011-SA5C-SB-9.0-10.0							
SL-057-SA5B-SS-0.0-0.5							
SL-234-SA5B-SS-0.0-0.5							
SL-235-SA5B-SS-0.0-0.5							
SL-287-SA5B-SS-0.0-0.5							
SL-288-SA5B-SS-0.0-0.5							
SL-290-SA5B-SS-0.0-0.5)							
SL-288-SA5B-SS-0.0-0.5MSD	ANTIMONY	-	71	75.00-125.00	-	ANTIMONY	
(DUP03-SA5B-QC-121010							
SL-005-SA5C-SB-4.0-5.0							
SL-005-SA5C-SB-9.0-10.0							
SL-008-SA5C-SB-4.0-5.0							
SL-008-SA5C-SB-8.0-9.0							
SL-009-SA5C-SB-4.0-5.0							
SL-009-SA5C-SB-9.0-10.0							
SL-010-SA5C-SB-4.0-5.0							J(all detects)
SL-010-SA5C-SB-9.0-10.0							UJ(all non-detects)
SL-011-SA5C-SB-4.0-5.0							
SL-011-SA5C-SB-9.0-10.0							
SL-057-SA5B-SS-0.0-0.5							
SL-234-SA5B-SS-0.0-0.5							
SL-235-SA5B-SS-0.0-0.5							
SL-287-SA5B-SS-0.0-0.5							
SL-288-SA5B-SS-0.0-0.5							
SL-290-SA5B-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: DE035_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-288-SA5B-SS-0.0-0.5MS (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	SELENIUM	135	-	75.00-125.00	-	SELENIUM	J(all detects)
SL-288-SA5B-SS-0.0-0.5MS SL-288-SA5B-SS-0.0-0.5MSD (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	MOLYBDENUM	152	136	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-288-SA5B-SS-0.0-0.5MS SL-288-SA5B-SS-0.0-0.5MSD (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	BARIUM	185	151	75.00-125.00	-	BARIUM	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_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-288-SA5B-SS-0.0-0.5MS **SL-288-SA5B-SS-0.0-0.5MSD** (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	ALUMINUM MAGNESIUM PHOSPHORUS	731 146 182	616 - 140	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM MAGNESIUM PHOSPHORUS	J(all detects) Al, Mg No Qual, >4x
SL-288-SA5B-SS-0.0-0.5MSD (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	IRON	-	-11	75.00-125.00	-	IRON	No Qual, >4x
SL-288-SA5B-SS-0.0-0.5MS **SL-288-SA5B-SS-0.0-0.5MSD** (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	CALCIUM MANGANESE	803 163	1941 -	75.00-125.00 75.00-125.00	36 (20.00) 23 (20.00)	CALCIUM MANGANESE	J(all detects) UJ(all non-detects) Ca 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: DE035 Laboratory: LL

EDD Filename: DE035_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-288-SA5B-SS-0.0-0.5MS SL-288-SA5B-SS-0.0-0.5MSD (SL-288-SA5B-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	226	-	39.00-167.00	76 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-288-SA5B-SS-0.0-0.5MSD (SL-288-SA5B-SS-0.0-0.5)	3,3'-DICHLOROBENZIDINE	-	-	16.00-119.00	40 (30.00)	3,3'-DICHLOROBENZIDINE	J(all detects)
	ANILINE	-	-	35.00-95.00	31 (30.00)	ANILINE	
	BENZOIC ACID	-	-	10.00-173.00	71 (30.00)	BENZOIC ACID	

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-288-SA5B-SS-0.0-0.5MS SL-288-SA5B-SS-0.0-0.5MSD (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	TITANIUM	209	171	75.00-125.00	-	TITANIUM	J(all detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: DE035_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-288-SA5B-SS-0.0-0.5MS (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	Nitrate-NO3	79	-	80.00-120.00	-	Nitrate-NO3	J(all detects) UJ(all non-detects)
SL-009-SA5C-SB-9.0-10.0MS (SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5)	FLUORIDE	72	-	80.00-120.00	-	FLUORIDE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-009-SA5C-SB-9.0-10.0DUP	FLUORIDE	21	20.00	
(SL-005-SA5C-SB-4.0-5.0	Nitrate-NO3	200	20.00	
SL -005-SA5C-SB-9.0-10.0				
SL -009-SA5C-SB-4.0-5.0				No Qual
SL -009-SA5C-SB-9.0-10.0				OK by difference
SL -234-SA5B-SS-0.0-0.5				
SL -235-SA5B-SS-0.0-0.5				
SL -287-SA5B-SS-0.0-0.5)				
SL-288-SA5B-SS-0.0-0.5DUP	FLUORIDE	200	20.00	
(DUP03-SA5B-QC-121010	Nitrate-NO3	200	20.00	
SL -005-SA5C-SB-4.0-5.0				
SL -008-SA5C-SB-4.0-5.0				
SL -008-SA5C-SB-8.0-9.0				
SL -010-SA5C-SB-4.0-5.0				
SL -010-SA5C-SB-9.0-10.0				
SL -011-SA5C-SB-4.0-5.0				No Qual
SL -011-SA5C-SB-9.0-10.0				OK by difference
SL -057-SA5B-SS-0.0-0.5				
SL -234-SA5B-SS-0.0-0.5				
SL -235-SA5B-SS-0.0-0.5				
SL -287-SA5B-SS-0.0-0.5				
SL -288-SA5B-SS-0.0-0.5				
SL -290-SA5B-SS-0.0-0.5)				

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-288-SA5B-SS-0.0-0.5DUP	ALUMINUM	22	20.00	
(DUP03-SA5B-QC-121010	LITHIUM	23	20.00	
SL -005-SA5C-SB-4.0-5.0	MANGANESE	47	20.00	
SL -005-SA5C-SB-9.0-10.0	TIN	23	20.00	
SL -008-SA5C-SB-4.0-5.0				
SL -008-SA5C-SB-8.0-9.0				
SL -009-SA5C-SB-4.0-5.0				
SL -009-SA5C-SB-9.0-10.0				
SL -010-SA5C-SB-4.0-5.0				J(all detects)
SL -010-SA5C-SB-9.0-10.0				UJ(all non-detects)
SL -011-SA5C-SB-4.0-5.0				
SL -011-SA5C-SB-9.0-10.0				Li, Sn No Qual
SL -057-SA5B-SS-0.0-0.5				OK by difference
SL -234-SA5B-SS-0.0-0.5				
SL -235-SA5B-SS-0.0-0.5				
SL -287-SA5B-SS-0.0-0.5				
SL -288-SA5B-SS-0.0-0.5				
SL -290-SA5B-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	*Analyte*	*Sample RPD*	*eQAPP RPD*	*Flag*
SL-288-SA5B-SS-0.0-0.5DUP	ANTIMONY	108	20.00	
(DUP03-SA5B-QC-121010	BERYLLIUM	31	20.00	
SL -005-SA5C-SB-4.0-5.0	CADMIUM	41	20.00	
SL -005-SA5C-SB-9.0-10.0	CHROMIUM	27	20.00	
SL -008-SA5C-SB-4.0-5.0	COBALT	24	20.00	
SL -008-SA5C-SB-8.0-9.0	COPPER	22	20.00	
SL -009-SA5C-SB-4.0-5.0	MOLYBDENUM	33	20.00	
SL -009-SA5C-SB-9.0-10.0	NICKEL	24	20.00	
SL -010-SA5C-SB-4.0-5.0	THALLIUM	59	20.00	J(all detects)
SL -010-SA5C-SB-9.0-10.0	VANADIUM	25	20.00	UJ(all non-detects)
SL -011-SA5C-SB-4.0-5.0				
SL -011-SA5C-SB-9.0-10.0				Sb, Be, Cd, Tl
SL -057-SA5B-SS-0.0-0.5				No Qual
SL -234-SA5B-SS-0.0-0.5				OK by difference
SL -235-SA5B-SS-0.0-0.5				
SL -287-SA5B-SS-0.0-0.5				
SL -288-SA5B-SS-0.0-0.5				
SL -290-SA5B-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE035 Laboratory: LL

EDD Filename: PrepDE035_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03514AQ241821A (DUP03-SA5B-QC-121010 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J (all detects) R (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03519AQ241754A (DUP03-SA5B-QC-121010 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	METHOXYCHLOR	131	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P34908FQ221855 (DUP03-SA5B-QC-121010 SL-005-SA5C-SB-4.0-5.0 SL-005-SA5C-SB-9.0-10.0 SL-008-SA5C-SB-4.0-5.0 SL-008-SA5C-SB-8.0-9.0 SL-009-SA5C-SB-4.0-5.0 SL-009-SA5C-SB-9.0-10.0 SL-010-SA5C-SB-4.0-5.0 SL-010-SA5C-SB-9.0-10.0 SL-011-SA5C-SB-4.0-5.0 SL-011-SA5C-SB-9.0-10.0 SL-057-SA5B-SS-0.0-0.5 SL-234-SA5B-SS-0.0-0.5 SL-235-SA5B-SS-0.0-0.5 SL-287-SA5B-SS-0.0-0.5 SL-288-SA5B-SS-0.0-0.5 SL-290-SA5B-SS-0.0-0.5)	ALUMINUM	76	-	80.00-120.00	-	ALUMINUM	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

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

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-010-SA5C-SB-4.0-5.0	N-Nitrosodimethylamine-d6	156	50.00-150.00	All Target Analytes	J (all detects)

Method: **8082**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SL-057-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SL-288-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: PrepDE035_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: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
ALUMINUM	3760	3240	15	50.00	No Qualifiers Applied
BORON	3.02	2.88	5	50.00	
CALCIUM	7300	8080	10	50.00	
IRON	5330	5290	1	50.00	
LITHIUM	3.2	2.9	10	50.00	
MAGNESIUM	1030	1010	2	50.00	
MANGANESE	104	105	1	50.00	
PHOSPHORUS	320	357	11	50.00	
POTASSIUM	595	627	5	50.00	
SODIUM	51.4	54.3	5	50.00	
STRONTIUM	14.8	15.4	4	50.00	
TIN	1.85	1.80	3	50.00	
TITANIUM	310	291	6	50.00	
Zirconium	2.52	2.03	22	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
ARSENIC	3.22	3.76	15	50.00	No Qualifiers Applied
BARIUM	21.9	24.2	10	50.00	
BERYLLIUM	0.161	0.149	8	50.00	
CADMIUM	0.0987	0.110	11	50.00	
CHROMIUM	13.2	13.7	4	50.00	
COBALT	2.34	2.52	7	50.00	
COPPER	3.30	4.05	20	50.00	
MOLYBDENUM	0.841	0.826	2	50.00	
NICKEL	7.44	8.00	7	50.00	
SELENIUM	0.193	0.117	49	50.00	
THALLIUM	0.0604	0.0571	6	50.00	
VANADIUM	15.3	16.5	8	50.00	
ZINC	13.0	15.6	18	50.00	
ANTIMONY	0.366	0.123	99	50.00	J(all detects)
LEAD	1.78	5.42	101	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
HEXAVALENT CHROMIUM	1.0 U	0.30	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: DE035 **Laboratory: LL**

EDD Filename: PrepDE035_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
MIREX	0.36 U	0.10	200	50.00	J(all detects) UJ(all non-detects)

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
AROCLOR 1248	1.8 U	0.78	200	50.00	
AROCLOR 1254	1.2	1.8 U	200	50.00	J(all detects)
AROCLOR 1260	3.8	2.1	58	50.00	UJ(all non-detects)
Aroclor 5460	2.7	1.4	63	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
ANTHRACENE	0.84	1.8 U	200	50.00	
BENZO(A)ANTHRACENE	1.0	1.8 U	200	50.00	
BENZO(A)PYRENE	1.5	1.8 U	200	50.00	
BENZO(B)FLUORANTHENE	4.1	1.0	122	50.00	
BENZO(G,H,I)PERYLENE	1.1	1.8 U	200	50.00	
BENZO(K)FLUORANTHENE	1.6	1.8 U	200	50.00	J(all detects)
CHRYSENE	2.6	0.95	93	50.00	UJ(all non-detects)
FLUORANTHENE	2.8	1.6	55	50.00	
INDENO(1,2,3-CD)PYRENE	0.99	1.8 U	200	50.00	
NAPHTHALENE	1.7 U	0.71	200	50.00	
PHENANTHRENE	1.6	0.84	62	50.00	
PYRENE	2.2	1.3	51	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
BIS(2-ETHYLHEXYL)PHTHALATE	350 U	27	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
PH	8.71	8.70	0	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: PrepDE035_v1 **eQAPP Name: CDM_SSFL_110509**

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-288-SA5B-SS-0.0-0.5	DUP03-SA5B-QC-121010			
Oxidation Reduction Potential	439	416	5		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA5C-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	72.8	73.3	PQL	ng/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	N-NITROSODIMETHYLAMINE	J	70.0	73.0	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.1	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	BORON	J	2.88	5.25	PQL	mg/Kg	J (all detects)
	SODIUM	J	54.3	105	PQL	mg/Kg	
	TIN	J	1.80	10.5	PQL	mg/Kg	
	Zirconium	J	2.03	5.25	PQL	mg/Kg	
SL-005-SA5C-SB-4.0-5.0	TIN	J	2.19	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.74	5.59	PQL	mg/Kg	
SL-005-SA5C-SB-9.0-10.0	TIN	J	1.92	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.06	5.34	PQL	mg/Kg	
SL-008-SA5C-SB-4.0-5.0	TIN	J	2.70	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.77	5.70	PQL	mg/Kg	
SL-008-SA5C-SB-8.0-9.0	BORON	J	5.01	5.42	PQL	mg/Kg	J (all detects)
	SODIUM	J	89.6	108	PQL	mg/Kg	
	TIN	J	2.74	10.8	PQL	mg/Kg	
SL-009-SA5C-SB-4.0-5.0	TIN	J	2.06	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.67	5.24	PQL	mg/Kg	
SL-009-SA5C-SB-9.0-10.0	TIN	J	2.46	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.33	5.43	PQL	mg/Kg	
SL-010-SA5C-SB-4.0-5.0	TIN	J	2.55	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.94	5.60	PQL	mg/Kg	
SL-010-SA5C-SB-9.0-10.0	TIN	J	2.58	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.48	5.42	PQL	mg/Kg	
SL-011-SA5C-SB-4.0-5.0	TIN	J	2.43	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.930	5.39	PQL	mg/Kg	
SL-011-SA5C-SB-9.0-10.0	TIN	J	2.21	10.4	PQL	mg/Kg	J (all detects)
SL-057-SA5B-SS-0.0-0.5	TIN	J	2.41	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.09	5.62	PQL	mg/Kg	
SL-234-SA5B-SS-0.0-0.5	SODIUM	J	106	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.16	10.7	PQL	mg/Kg	
	Zirconium	J	1.78	5.36	PQL	mg/Kg	
SL-235-SA5B-SS-0.0-0.5	SODIUM	J	86.4	105	PQL	mg/Kg	J (all detects)
	TIN	J	2.31	10.5	PQL	mg/Kg	
	Zirconium	J	1.09	5.25	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-287-SA5B-SS-0.0-0.5	BORON	J	4.78	5.30	PQL	mg/Kg	J (all detects)
	SODIUM	J	66.7	106	PQL	mg/Kg	
	TIN	J	1.99	10.6	PQL	mg/Kg	
	Zirconium	J	1.22	5.30	PQL	mg/Kg	
SL-288-SA5B-SS-0.0-0.5	BORON	J	3.02	5.07	PQL	mg/Kg	J (all detects)
	SODIUM	J	51.4	101	PQL	mg/Kg	
	TIN	J	1.85	10.1	PQL	mg/Kg	
	Zirconium	J	2.52	5.07	PQL	mg/Kg	
SL-290-SA5B-SS-0.0-0.5	TIN	J	1.46	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.03	5.36	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	ANTIMONY	J	0.123	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.117	0.412	PQL	mg/Kg	
	THALLIUM	J	0.0571	0.103	PQL	mg/Kg	
SL-005-SA5C-SB-4.0-5.0	SELENIUM	J	0.284	0.443	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0434	0.111	PQL	mg/Kg	
SL-005-SA5C-SB-9.0-10.0	ANTIMONY	J	0.143	0.216	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.160	0.431	PQL	mg/Kg	
	SILVER	J	0.0316	0.108	PQL	mg/Kg	
SL-008-SA5C-SB-4.0-5.0	SELENIUM	J	0.307	0.456	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0421	0.114	PQL	mg/Kg	
SL-008-SA5C-SB-8.0-9.0	ANTIMONY	J	0.150	0.213	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0604	0.106	PQL	mg/Kg	
	SELENIUM	J	0.215	0.425	PQL	mg/Kg	
SL-009-SA5C-SB-4.0-5.0	ANTIMONY	J	0.180	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.220	0.424	PQL	mg/Kg	
	SILVER	J	0.0214	0.106	PQL	mg/Kg	
SL-009-SA5C-SB-9.0-10.0	ANTIMONY	J	0.123	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0957	0.434	PQL	mg/Kg	
	SILVER	J	0.0204	0.109	PQL	mg/Kg	
SL-010-SA5C-SB-4.0-5.0	ANTIMONY	J	0.152	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.178	0.448	PQL	mg/Kg	
	SILVER	J	0.0461	0.112	PQL	mg/Kg	
SL-010-SA5C-SB-9.0-10.0	ANTIMONY	J	0.107	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.160	0.434	PQL	mg/Kg	
	SILVER	J	0.0196	0.108	PQL	mg/Kg	
SL-011-SA5C-SB-4.0-5.0	SELENIUM	J	0.213	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0422	0.108	PQL	mg/Kg	
SL-011-SA5C-SB-9.0-10.0	ANTIMONY	J	0.122	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.132	0.424	PQL	mg/Kg	
	SILVER	J	0.0214	0.106	PQL	mg/Kg	
SL-057-SA5B-SS-0.0-0.5	ANTIMONY	J	0.148	0.225	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.231	0.450	PQL	mg/Kg	
	SILVER	J	0.0416	0.112	PQL	mg/Kg	
SL-234-SA5B-SS-0.0-0.5	ANTIMONY	J	0.119	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.141	0.425	PQL	mg/Kg	
	SILVER	J	0.0378	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-235-SA5B-SS-0.0-0.5	ANTIMONY	J	0.186	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.110	0.424	PQL	mg/Kg	
	SILVER	J	0.0302	0.106	PQL	mg/Kg	
SL-287-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0875	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0751	0.420	PQL	mg/Kg	
	SILVER	J	0.0148	0.105	PQL	mg/Kg	
SL-288-SA5B-SS-0.0-0.5	CADMIUM	J	0.0987	0.102	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.193	0.410	PQL	mg/Kg	
	THALLIUM	J	0.0604	0.102	PQL	mg/Kg	
SL-290-SA5B-SS-0.0-0.5	SELENIUM	J	0.180	0.417	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0258	0.104	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	HEXAVALENT CHROMIUM	J	0.30	1.1	PQL	mg/Kg	J (all detects)
SL-008-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.31	1.2	PQL	mg/Kg	J (all detects)
SL-008-SA5C-SB-8.0-9.0	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-057-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.2	PQL	mg/Kg	J (all detects)
SL-234-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-287-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.33	1.1	PQL	mg/Kg	J (all detects)
SL-290-SA5B-SS-0.0-0.5	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-008-SA5C-SB-8.0-9.0	MERCURY	J	0.0165	0.108	PQL	mg/Kg	J (all detects)
SL-234-SA5B-SS-0.0-0.5	MERCURY	J	0.0082	0.106	PQL	mg/Kg	J (all detects)
SL-235-SA5B-SS-0.0-0.5	MERCURY	J	0.0186	0.107	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA5C-SB-4.0-5.0	ETHANOL	J	190	580	PQL	ug/Kg	J (all detects)
SL-005-SA5C-SB-9.0-10.0	ETHANOL	J	190	550	PQL	ug/Kg	J (all detects)
	METHANOL	J	110	550	PQL	ug/Kg	
SL-009-SA5C-SB-4.0-5.0	ETHANOL	J	180	530	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-009-SA5C-SB-9.0-10.0	ETHANOL	J	190	560	PQL	ug/Kg	J (all detects)
SL-010-SA5C-SB-4.0-5.0	ETHANOL	J	210	570	PQL	ug/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	ETHANOL	J	180	550	PQL	ug/Kg	J (all detects)
SL-011-SA5C-SB-4.0-5.0	ETHANOL	J	230	550	PQL	ug/Kg	J (all detects)
SL-011-SA5C-SB-9.0-10.0	ETHANOL	J	200	540	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA5C-SB-4.0-5.0	EFH (C30-C40)	J	0.60	1.4	PQL	mg/Kg	J (all detects)
SL-005-SA5C-SB-9.0-10.0	EFH (C15-C20)	J	0.58	1.3	PQL	mg/Kg	J (all detects)
SL-009-SA5C-SB-9.0-10.0	EFH (C15-C20)	J	1.2	1.3	PQL	mg/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	EFH (C15-C20)	J	0.49	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	MIREX	J	0.10	0.36	PQL	ug/Kg	J (all detects)
SL-290-SA5B-SS-0.0-0.5	4,4'-DDT	J	0.21	0.36	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	AROCLOR 1248 Aroclor 5460	J J	0.78 1.4	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-005-SA5C-SB-4.0-5.0	AROCLOR 1254	J	0.86	2.0	PQL	ug/Kg	J (all detects)
SL-005-SA5C-SB-9.0-10.0	AROCLOR 1248 AROCLOR 1260 Aroclor 5460	J J J	1.4 0.92 1.7	1.9 1.9 3.6	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-008-SA5C-SB-4.0-5.0	AROCLOR 1260	J	0.49	2.0	PQL	ug/Kg	J (all detects)
SL-009-SA5C-SB-4.0-5.0	AROCLOR 1254	J	0.91	1.8	PQL	ug/Kg	J (all detects)
SL-009-SA5C-SB-9.0-10.0	AROCLOR 1254 AROCLOR 1260	J J	0.93 0.66	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	AROCLOR 1260	J	0.44	1.9	PQL	ug/Kg	J (all detects)
SL-011-SA5C-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	0.64 1.4	1.9 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-011-SA5C-SB-9.0-10.0	AROCLOR 1260	J	0.48	1.8	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-057-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.64	2.0	PQL	ug/Kg	J (all detects)
SL-234-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.3 1.1 2.1	1.9 1.9 3.6	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-235-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.4 1.7	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-287-SA5B-SS-0.0-0.5	Aroclor 5460	J	1.9	3.6	PQL	ug/Kg	J (all detects)
SL-288-SA5B-SS-0.0-0.5	AROCLOR 1254 Aroclor 5460	J J	1.2 2.7	1.8 3.4	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-287-SA5B-SS-0.0-0.5	2,4-D	J	1.6	3.9	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.81 0.11	4.3 4.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-005-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	1.4 0.12	3.9 3.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-008-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.0 0.12	4.6 4.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-009-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.1 0.15	4.4 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-009-SA5C-SB-9.0-10.0	ACETONE METHYLENE CHLORIDE TOLUENE	J J J	7.7 1.8 0.13	8.9 4.5 4.5	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-010-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	1.6 0.15	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	1.5 0.12	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-011-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE TOLUENE	J J	0.94 0.11	4.2 4.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-011-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE TOLUENE	J J	1.0 0.09	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
DUP03-SA5B-QC-121010	BIS(2-ETHYLHEXYL)PHTHALATE	J	27	350	PQL	ug/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: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-005-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	380	PQL	ug/Kg	J (all detects)
SL-008-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	380	PQL	ug/Kg	J (all detects)
SL-009-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-010-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	380	PQL	ug/Kg	J (all detects)
SL-010-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-011-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	370	PQL	ug/Kg	J (all detects)
SL-011-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	360	PQL	ug/Kg	J (all detects)
SL-057-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	390	PQL	ug/Kg	J (all detects)
SL-234-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	21	180	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	360	PQL	ug/Kg	
	CHRYSENE	J	21	180	PQL	ug/Kg	
	FLUORANTHENE	J	25	180	PQL	ug/Kg	
	PYRENE	J	33	180	PQL	ug/Kg	
SL-235-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	21	360	PQL	ug/Kg	J (all detects)
SL-287-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	360	PQL	ug/Kg	J (all detects)
SL-290-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	360	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP03-SA5B-QC-121010	BENZO(B)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.95	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.71	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.84	1.8	PQL	ug/Kg	
	PYRENE	J	1.3	1.8	PQL	ug/Kg	
SL-005-SA5C-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.8	PQL	ug/Kg	
	PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-008-SA5C-SB-4.0-5.0	NAPHTHALENE	J	0.89	1.9	PQL	ug/Kg	J (all detects)
SL-009-SA5C-SB-4.0-5.0	BENZO(B)FLUORANTHENE	J	0.81	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.51	1.8	PQL	ug/Kg	
SL-009-SA5C-SB-9.0-10.0	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	0.75	1.9	PQL	ug/Kg	
SL-010-SA5C-SB-4.0-5.0	ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.99	1.9	PQL	ug/Kg	
SL-010-SA5C-SB-9.0-10.0	BENZO(A)ANTHRACENE	J	0.92	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	0.84	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.3	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.2	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	
	PYRENE	J	1.4	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE035 **Laboratory: LL**

EDD Filename: DE035_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-011-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.74	1.8	PQL	ug/Kg	
SL-011-SA5C-SB-9.0-10.0	BENZO(B)FLUORANTHENE	J	0.81	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.60	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.74	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	
SL-057-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.80	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.59	1.9	PQL	ug/Kg	
SL-234-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.57	1.8	PQL	ug/Kg	J (all detects)
	DIBENZO(A,H)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.8	PQL	ug/Kg	
SL-235-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.99	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
SL-287-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.62	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.97	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.83	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.7	1.8	PQL	ug/Kg	
SL-288-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.84	1.7	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.0	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.5	1.7	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.1	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.99	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.7	PQL	ug/Kg	
SL-290-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	9.1	18	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	15	18	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-010-SA5C-SB-9.0-10.0	FORMALDEHYDE	J	670	1600	PQL	ug/Kg	J (all detects)

LDC #: 25337G4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-5-11
SDG #: DE035 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CC
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	>RPDout
VI.	Matrix Spike Analysis	N	MSD(Al,Ca,Fe,Mg >4X)
VII.	Duplicate Sample Analysis	N	DR(Sb,Be,Cd,Li,Tl,Sn <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	J/UJ/A (Pb)
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-011-SA5C-SB-4.0-5.0	11	SL-234-SA5B-SS-0.0-0.5	21		31	
2	SL-011-SA5C-SB-9.0-10.0	12	SL-235-SA5B-SS-0.0-0.5	22		32	
3	SL-288-SA5B-SS-0.0-0.5	13	SL-287-SA5B-SS-0.0-0.5	23		33	
4	SL-290-SA5B-SS-0.0-0.5	14	SL-005-SA5C-SB-4.0-5.0	24		34	
5	DUP03-SA5B-QC-121010	15	SL-005-SA5C-SB-9.0-10.0	25		35	
6	SL-010-SA5C-SB-4.0-5.0	16	SL-009-SA5C-SB-4.0-5.0	26		36	
7	SL-010-SA5C-SB-9.0-10.0	17	SL-009-SA5C-SB-9.0-10.0	27		37	
8	SL-008-SA5C-SB-4.0-5.0	18	SL-288-SA5B-SS-0.0-0.5MS	28		38	
9	SL-008-SA5C-SB-8.0-9.0	19	SL-288-SA5B-SS-0.0-0.5MSD	29		39	
10	SL-027-SA5B-SS-0.0-0.5	20	SL-288-SA5B-SS-0.0-0.5DUP	30		40	

Notes:

LDC #: 25337G4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer:
2nd Reviewer:

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x x (ICPMS: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All

			Sample Identification															
Analyte	Maximum ICB/CCB[a] (ug/l)	Blank Action Limit	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Sb	0.72	0.72	0.22	0.12	0.37	0.27	0.12	0.15	0.11	0.24	0.15	0.15	0.12	0.19	0.087	0.27	0.14	0.18	0.12
Be	0.13	0.13																	

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE035
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6162943BKG Serial Dilution Lab Sample ID: 6162943L
Batch ID(s): P34908F, P34926E, P35508A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		37024.7600		35601.2000		4		P
Antimony	121	1.7860		1.7855	B	0		MS
Arsenic	75	15.7400		13.9900		11		MS
Barium	137	106.8000		101.5000		5		MS
Beryllium	9	0.7839		0.7600	B	3		MS
Boron		29.7800	B	44.5000	U	100		P
Cadmium	111	0.4815	B	0.9000	U	100		MS
Calcium		71909.2700		71789.1500		0		P
Chromium	52	64.5500		62.3500		3		MS
Cobalt	59	11.4100		11.0850		3		MS
Copper	63	16.0900		15.6400		3		MS
Iron		52521.8200		51997.1000		1		P
Lead	208	8.6800		7.6200		12	E	MS
Lithium		31.2000		47.5000	B	52		P
Magnesium		10173.9300		10246.2000		1		P
Manganese		1022.5600		1042.4000		2		P
Molybdenum	98	4.1050		4.3240		5		MS
Nickel	60	36.3000		35.6900		2		MS
Phosphorus		3159.0300		3167.8500		0		P
Potassium		5866.1000		5950.8000		1		P
Selenium	78	0.9415	B	1.0000	U	100		MS
Silver	107	0.0600	U	0.3000	U			MS
Sodium		506.9400	B	1865.0000	U	100		P
Strontium		145.9500		142.6000		2		P
Thallium	203	0.2946	B	0.7500	U	100		MS
Tin		18.2700	B	50.0000	U	100		P
Titanium		3110.4200		3054.4000		2		P
Vanadium	51	74.7300		72.3000		3		MS
Zinc	66	63.4400		59.3500	B	6		MS
Zirconium		24.8400	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

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	6163606	N	3050B	6010B	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3050B	6020	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3060A	7199	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8081A	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8082	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8151A	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8270C	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	3550B	8270C SIM	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	Gen Prep	9045M	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	METHOD	300.0	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	METHOD	314.0	III
13-Dec-2010	SL-301-SA5B-SS-0.0-0.5	6163606	N	METHOD	7471A	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3050B	6010B	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3050B	6020	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3060A	7199	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8081A	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8082	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8151A	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8270C	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	3550B	8270C SIM	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	Gen Prep	9045M	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	METHOD	300.0	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	METHOD	314.0	III
13-Dec-2010	SL-074-SA5B-SS-0.0-0.5	6163605	N	METHOD	7471A	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3050B	6010B	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	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
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3060A	7199	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8081A	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8082	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8151A	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8270C	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	3550B	8270C SIM	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	Gen Prep	9045M	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	METHOD	300.0	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	METHOD	314.0	III
13-Dec-2010	SED-031-SIV-SD-0.0-0.5	6163611	N	METHOD	7471A	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3050B	6010B	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3050B	6020	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3060A	7199	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8081A	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8082	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8151A	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8270C	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	3550B	8270C SIM	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	Gen Prep	9045M	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	METHOD	300.0	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	METHOD	314.0	III
13-Dec-2010	SL-076-SA5B-SS-0.0-0.5	6163598	N	METHOD	7471A	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3050B	6010B	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3050B	6020	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3060A	7199	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	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
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8082	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8151A	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8270C	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	3550B	8270C SIM	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	Gen Prep	9045M	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	METHOD	300.0	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	METHOD	314.0	III
13-Dec-2010	SL-073-SA5B-SS-0.0-0.5	6163607	N	METHOD	7471A	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3050B	6010B	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3050B	6020	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3060A	7199	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8081A	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8082	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8151A	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8270C	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	3550B	8270C SIM	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	Gen Prep	9045M	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	METHOD	300.0	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	METHOD	314.0	III
13-Dec-2010	SL-072-SA5B-SS-0.0-0.5	6163608	N	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3050B	6010B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3060A	7199	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8081A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8082	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	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
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8270C	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	3550B	8270C SIM	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	Gen Prep	9045M	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	METHOD	300.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	METHOD	314.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	6163599	N	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3050B	6010B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3060A	7199	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8081A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8082	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8151A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8270C	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	3550B	8270C SIM	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	METHOD	300.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	METHOD	314.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	6163600	MS	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3050B	6010B	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8081A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8082	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8151A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8270C	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	3550B	8270C SIM	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	6163601	MSD	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	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
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	3050B	6020	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	3060A	7199	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	Gen Prep	9045M	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	METHOD	300.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	METHOD	314.0	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5DUP	6163602	DUP	METHOD	7471A	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5	P163599	N	METHOD	6850	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MSD	P163599M241911A	MSD	METHOD	6850	III
13-Dec-2010	SL-071-SA5B-SS-0.0-0.5MS	P163599R241905A	MS	METHOD	6850	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3050B	6010B	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3050B	6020	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3060A	7199	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8081A	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8082	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8151A	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8270C	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	3550B	8270C SIM	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	Gen Prep	9045M	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	METHOD	300.0	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	METHOD	314.0	III
13-Dec-2010	DUP04-SA5B-QC-121310	6163609	FD	METHOD	7471A	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3050B	6010B	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3050B	6020	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3060A	7199	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8081A	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	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
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8151A	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8270C	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	3550B	8270C SIM	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	Gen Prep	9045M	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	METHOD	300.0	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	METHOD	314.0	III
13-Dec-2010	SED-040-SIV-SD-0.0-0.5	6163613	N	METHOD	7471A	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3050B	6010B	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3050B	6020	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3060A	7199	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8081A	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8082	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8151A	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8270C	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	3550B	8270C SIM	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	Gen Prep	9045M	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	METHOD	300.0	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	METHOD	314.0	III
13-Dec-2010	SL-084-SA5B-SS-0.0-0.5	6163597	N	METHOD	7471A	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3050B	6010B	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3050B	6020	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3060A	7199	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8081A	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8082	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8151A	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	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
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	3550B	8270C SIM	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	Gen Prep	9045M	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	METHOD	300.0	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	METHOD	314.0	III
13-Dec-2010	SL-083-SA5B-SS-0.0-0.5	6163604	N	METHOD	7471A	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3050B	6010B	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3050B	6020	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3060A	7199	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8081A	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8082	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8151A	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8270C	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	3550B	8270C SIM	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	Gen Prep	9045M	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	METHOD	300.0	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	METHOD	314.0	III
13-Dec-2010	SL-139-SA5B-SS-0.0-0.5	6163603	N	METHOD	7471A	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3050B	6010B	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3050B	6020	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3060A	7199	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8081A	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8082	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8151A	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8270C	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	3550B	8270C SIM	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	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
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	METHOD	300.0	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	METHOD	314.0	III
13-Dec-2010	SL-078-SA5B-SS-0.0-0.5	6163596	N	METHOD	7471A	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3050B	6010B	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3050B	6020	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3060A	7199	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8081A	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8082	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8151A	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8270C	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	3550B	8270C SIM	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	Gen Prep	9045M	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	METHOD	300.0	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	METHOD	314.0	III
13-Dec-2010	SED-030-SIV-SD-0.0-0.5	6163612	N	METHOD	7471A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3050B	6010B	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3050B	6020	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3060A	7199	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8081A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8082	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8151A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8270C	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	3550B	8270C SIM	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	Gen Prep	9045M	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	METHOD	300.0	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	METHOD	314.0	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
13-Dec-2010	SED-029-SIV-SD-0.0-0.5	6163610	N	METHOD	7471A	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5DUP	P163610D271838B	DUP	METHOD	300.0	III
13-Dec-2010	SED-029-SIV-SD-0.0-0.5MS	P163610R271852B	MS	METHOD	300.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3050B	6010B	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3050B	6020	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3060A	7199	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8081A	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8082	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8151A	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8270C	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	3550B	8270C SIM	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	Gen Prep	9045M	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	300.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	314.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	6850	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5	6163618	N	METHOD	7471A	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5DUP	P163618D272230B	DUP	METHOD	314.0	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5DUP	P163618D291430B	DUP	Gen Prep	9045M	III
13-Dec-2010	SL-236-SA5B-SS-0.0-0.5MS	P163618R272254B	MS	METHOD	314.0	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3050B	6010B	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3050B	6020	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3060A	7199	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8081A	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8082	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8151A	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8270C	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	3550B	8270C SIM	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	Gen Prep	9045M	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	METHOD	300.0	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	METHOD	314.0	III
13-Dec-2010	SL-092-SA5B-SS-0.0-0.5	6163615	N	METHOD	7471A	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3050B	6010B	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3050B	6020	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3060A	7199	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8081A	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8082	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8151A	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8270C	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	3550B	8270C SIM	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	Gen Prep	9045M	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	METHOD	300.0	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	METHOD	314.0	III
13-Dec-2010	SL-086-SA5B-SS-0.0-0.5	6163614	N	METHOD	7471A	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3050B	6010B	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3050B	6020	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3060A	7199	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8081A	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8082	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8151A	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8270C	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	3550B	8270C SIM	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	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
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	METHOD	300.0	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	METHOD	314.0	III
13-Dec-2010	SL-089-SA5B-SS-0.0-0.5	6163617	N	METHOD	7471A	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3050B	6010B	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3050B	6020	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3060A	7199	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8081A	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8082	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8151A	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8270C	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	3550B	8270C SIM	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	Gen Prep	9045M	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	METHOD	300.0	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	N	METHOD	314.0	III
13-Dec-2010	SL-103-SA5B-SS-0.0-0.5	6163616	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **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
FLUORIDE	3.4		0.85	MDL	1.1	PQL	mg/Kg	J	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
FLUORIDE	2.2		0.84	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	0.87	J	0.84	MDL	1.1	PQL	mg/Kg	J	Z, Q

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
FLUORIDE	2.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	3.4		0.85	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	2.3		0.88	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	2.1		0.87	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	2.2		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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

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
FLUORIDE	7.1		0.91	MDL	1.1	PQL	mg/Kg	J	Q

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
FLUORIDE	2.6		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: GENCHEM

Method: 314.0 **Matrix:** SO

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
PERCHLORATE	11.8	J	9.6	MDL	31.8	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	102	J	39.6	MDL	106	PQL	mg/Kg	J	Z

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
TIN	2.42	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.10	J	0.893	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.8	J	39.7	MDL	106	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
BORON	4.76	J	0.948	MDL	5.32	PQL	mg/Kg	J	Z
TIN	2.05	J	1.06	MDL	10.6	PQL	mg/Kg	U	B

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	78.9	J	42.8	MDL	115	PQL	mg/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
TIN	2.34	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.965	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
SODIUM	54.3	J	39.9	MDL	107	PQL	mg/Kg	J	Z

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
TIN	2.03	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	0.920	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	62.3	J	39.9	MDL	107	PQL	mg/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
BORON	5.27	J	0.952	MDL	5.35	PQL	mg/Kg	J	Z
TIN	1.82	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	1.05	J	0.898	MDL	5.35	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **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
BORON	4.15	J	0.931	MDL	5.23	PQL	mg/Kg	J	Z
TIN	2.40	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.01	J	0.879	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
SODIUM	98.9	J	37.5	MDL	101	PQL	mg/Kg	J	Z

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
TIN	2.20	J	1.01	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.32	J	0.845	MDL	5.03	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
SODIUM	87.5	J	37.7	MDL	101	PQL	mg/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
BORON	4.90	J	0.899	MDL	5.05	PQL	mg/Kg	J	Z
TIN	2.03	J	1.01	MDL	10.1	PQL	mg/Kg	U	B
Zirconium	1.75	J	0.848	MDL	5.05	PQL	mg/Kg	J	Z

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
BORON	4.88	J	0.923	MDL	5.19	PQL	mg/Kg	J	Z
TIN	2.34	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.49	J	0.871	MDL	5.19	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
BORON	2.78	J	0.936	MDL	5.26	PQL	mg/Kg	J	Z
TIN	2.39	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

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
BORON	3.77	J	0.944	MDL	5.30	PQL	mg/Kg	J	Z
TIN	2.09	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.26	J	0.891	MDL	5.30	PQL	mg/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
SODIUM	95.9	J	38.5	MDL	103	PQL	mg/Kg	J	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
BORON	4.46	J	0.919	MDL	5.16	PQL	mg/Kg	J	Z
TIN	2.24	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.82	J	0.868	MDL	5.16	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	86.4	J	40.4	MDL	108	PQL	mg/Kg	J	Z

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
BORON	3.91	J	0.964	MDL	5.42	PQL	mg/Kg	J	Z
TIN	2.45	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.910	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	71.0	J	38.4	MDL	103	PQL	mg/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
TIN	1.98	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.95	J	0.866	MDL	5.15	PQL	mg/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
TIN	2.20	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	3.43	J	0.874	MDL	5.20	PQL	mg/Kg	J	Z

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
TIN	2.05	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	3.79	J	0.937	MDL	5.57	PQL	mg/Kg	J	Z

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
TIN	2.33	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	5.02	J	0.918	MDL	5.47	PQL	mg/Kg	J	Z

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
TIN	2.72	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	3.64	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.25	J	1.05	MDL	10.5	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Zirconium	1.19	J	0.884	MDL	5.26	PQL	mg/Kg	J	Z

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
BORON	4.44	J	0.947	MDL	5.32	PQL	mg/Kg	J	Z
TIN	3.24	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.67	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.750		0.0521	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.113	MDL	0.417	PQL	mg/Kg	J	E, A

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.136	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	7.83		0.0625	MDL	0.417	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.771		0.0167	MDL	0.104	PQL	mg/Kg	J	Q, E
CADMIUM	0.382		0.0375	MDL	0.104	PQL	mg/Kg	J	Q, FD
CHROMIUM	28.8		0.125	MDL	0.417	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	9.00		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	15.1		0.0688	MDL	0.417	PQL	mg/Kg	J	Q, E
LEAD	11.3		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E
NICKEL	17.1		0.104	MDL	0.417	PQL	mg/Kg	J	Q, E
SILVER	1.22		0.0125	MDL	0.104	PQL	mg/Kg	J	Q, FD

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.144	J	0.0434	MDL	0.434	PQL	mg/Kg	J	Z

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.694		0.0543	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	100		0.117	MDL	0.434	PQL	mg/Kg	J	E, A

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0651	MDL	0.217	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.15		0.0651	MDL	0.434	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.463		0.0174	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.902		0.0391	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	23.0		0.130	MDL	0.434	PQL	mg/Kg	J	Q
COBALT	6.94		0.0217	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	17.8		0.0717	MDL	0.434	PQL	mg/Kg	J	Q, E
LEAD	50.6		0.0113	MDL	0.217	PQL	mg/Kg	J	Q, E
NICKEL	15.1		0.109	MDL	0.434	PQL	mg/Kg	J	Q, E
SILVER	0.147		0.0130	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.0478	MDL	0.478	PQL	mg/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.876		0.0597	MDL	0.119	PQL	mg/Kg	J	Q

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	202		0.129	MDL	0.478	PQL	mg/Kg	J	E, A

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.115	J	0.0717	MDL	0.239	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	7.83		0.0717	MDL	0.478	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.785		0.0191	MDL	0.119	PQL	mg/Kg	J	Q, E
CADMIUM	0.461		0.0430	MDL	0.119	PQL	mg/Kg	J	Q
CHROMIUM	33.4		0.143	MDL	0.478	PQL	mg/Kg	J	Q
COBALT	9.86		0.0239	MDL	0.119	PQL	mg/Kg	J	Q, E
COPPER	18.1		0.0789	MDL	0.478	PQL	mg/Kg	J	Q, E
LEAD	19.8		0.0124	MDL	0.239	PQL	mg/Kg	J	Q, E
NICKEL	22.2		0.119	MDL	0.478	PQL	mg/Kg	J	Q, E
SILVER	0.0806	J	0.0143	MDL	0.119	PQL	mg/Kg	J	Z, Q

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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	0.151	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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	0.584		0.0550	MDL	0.110	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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	112		0.119	MDL	0.440	PQL	mg/Kg	J	E, A

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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	0.0660	U	0.0660	MDL	0.220	PQL	mg/Kg	R	Q
ARSENIC	5.90		0.0660	MDL	0.440	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.546		0.0176	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.255		0.0396	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	25.1		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	7.18		0.0220	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	12.7		0.0726	MDL	0.440	PQL	mg/Kg	J	Q, E
LEAD	20.2		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E
NICKEL	15.1		0.110	MDL	0.440	PQL	mg/Kg	J	Q, E
SILVER	0.0557	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.192		0.0393	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.129	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *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		0.0545	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.118	MDL	0.436	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-040-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 10:19:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0654	U	0.0654	MDL	0.218	PQL	mg/Kg	R	Q
ARSENIC	4.31		0.0654	MDL	0.436	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.503		0.0174	MDL	0.109	PQL	mg/Kg	J	Q, E
CHROMIUM	20.5		0.131	MDL	0.436	PQL	mg/Kg	J	Q
COBALT	6.78		0.0218	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	9.21		0.0720	MDL	0.436	PQL	mg/Kg	J	Q, E
LEAD	10.8		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, E
NICKEL	13.0		0.109	MDL	0.436	PQL	mg/Kg	J	Q, E
SILVER	0.0217	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0935	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.620		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.114	MDL	0.423	PQL	mg/Kg	J	E, A

Sample ID: SL-071-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:09:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.102	J	0.0634	MDL	0.211	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.17		0.0634	MDL	0.423	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.693		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.210		0.0380	MDL	0.106	PQL	mg/Kg	J	Q, FD
CHROMIUM	25.5		0.127	MDL	0.423	PQL	mg/Kg	J	Q
COBALT	7.36		0.0211	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	11.9		0.0697	MDL	0.423	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.18		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	14.8		0.106	MDL	0.423	PQL	mg/Kg	J	Q, E
SILVER	0.241		0.0127	MDL	0.106	PQL	mg/Kg	J	Q, FD

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.114	J	0.0406	MDL	0.406	PQL	mg/Kg	J	Z

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.694		0.0508	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
BARIUM	135		0.110	MDL	0.406	PQL	mg/Kg	J	E, A

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.0917	J	0.0609	MDL	0.203	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.07		0.0609	MDL	0.406	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.676		0.0162	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.411		0.0366	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	25.1		0.122	MDL	0.406	PQL	mg/Kg	J	Q
COBALT	7.26		0.0203	MDL	0.102	PQL	mg/Kg	J	Q, E
COPPER	12.6		0.0670	MDL	0.406	PQL	mg/Kg	J	Q, E
LEAD	13.0		0.0106	MDL	0.203	PQL	mg/Kg	J	Q, E
NICKEL	14.5		0.102	MDL	0.406	PQL	mg/Kg	J	Q, E
SILVER	3.17		0.0122	MDL	0.102	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.138	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.956		0.0515	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	153		0.111	MDL	0.412	PQL	mg/Kg	J	E, A

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.0768	J	0.0618	MDL	0.206	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.02		0.0618	MDL	0.412	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.721		0.0165	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.291		0.0371	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	28.2		0.124	MDL	0.412	PQL	mg/Kg	J	Q
COBALT	7.93		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, E
COPPER	14.5		0.0680	MDL	0.412	PQL	mg/Kg	J	Q, E
LEAD	11.2		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, E
NICKEL	17.9		0.103	MDL	0.412	PQL	mg/Kg	J	Q, E
SILVER	0.298		0.0124	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.315	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.725		0.0539	MDL	0.108	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	140		0.116	MDL	0.431	PQL	mg/Kg	J	E, A

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.0647	U	0.0647	MDL	0.216	PQL	mg/Kg	R	Q
ARSENIC	6.82		0.0647	MDL	0.431	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.723		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.305		0.0388	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.129	MDL	0.431	PQL	mg/Kg	J	Q
COBALT	7.36		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	16.8		0.0712	MDL	0.431	PQL	mg/Kg	J	Q, E
LEAD	12.5		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	17.7		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E
SILVER	0.405		0.0129	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.133	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.504		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	135		0.115	MDL	0.425	PQL	mg/Kg	J	E, A

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0842	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q, 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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.92		0.0638	MDL	0.425	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.634		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.211		0.0383	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	31.1		0.128	MDL	0.425	PQL	mg/Kg	J	Q
COBALT	8.21		0.0213	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	15.5		0.0701	MDL	0.425	PQL	mg/Kg	J	Q, E
LEAD	7.96		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E
NICKEL	19.7		0.106	MDL	0.425	PQL	mg/Kg	J	Q, E
SILVER	0.0363	J	0.0128	MDL	0.106	PQL	mg/Kg	J	Z, Q

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.179	J	0.0432	MDL	0.432	PQL	mg/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.657		0.0540	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	166		0.117	MDL	0.432	PQL	mg/Kg	J	E, A

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.149	J	0.0649	MDL	0.216	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	6.22		0.0649	MDL	0.432	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.754		0.0173	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.865		0.0389	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	31.0		0.130	MDL	0.432	PQL	mg/Kg	J	Q
COBALT	11.3		0.0216	MDL	0.108	PQL	mg/Kg	J	Q, E
COPPER	18.9		0.0713	MDL	0.432	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: DE036
Laboratory: LL
EDD Filename: DE036_v1
eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-078-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
LEAD	17.7		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, E
NICKEL	21.0		0.108	MDL	0.432	PQL	mg/Kg	J	Q, E
SILVER	1.65		0.0130	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.176	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.958		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 10:49:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	172		0.114	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: SL-083-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.249		0.0632	MDL	0.211	PQL	mg/Kg	J	Q, Q, E
ARSENIC	10.2		0.0632	MDL	0.421	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.859		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	1.69		0.0379	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	41.4		0.126	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	10.0		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	25.9		0.0695	MDL	0.421	PQL	mg/Kg	J	Q, E
LEAD	77.7		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	23.0		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E
SILVER	0.243		0.0126	MDL	0.105	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.203	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.552		0.0547	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	102		0.118	MDL	0.438	PQL	mg/Kg	J	E, A

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0656	U	0.0656	MDL	0.219	PQL	mg/Kg	R	Q
ARSENIC	5.67		0.0656	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.588		0.0175	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.244		0.0394	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	23.6		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	6.96		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, E
COPPER	12.2		0.0722	MDL	0.438	PQL	mg/Kg	J	Q, E
LEAD	7.40		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	13.9		0.109	MDL	0.438	PQL	mg/Kg	J	Q, E
SILVER	0.0361	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.140	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.902		0.0526	MDL	0.105	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	122		0.114	MDL	0.420	PQL	mg/Kg	J	E, A

Sample ID: SL-086-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.0631	U	0.0631	MDL	0.210	PQL	mg/Kg	R	Q
ARSENIC	5.85		0.0631	MDL	0.420	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.729		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.287		0.0378	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	22.9		0.126	MDL	0.420	PQL	mg/Kg	J	Q
COBALT	7.16		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	10.5		0.0694	MDL	0.420	PQL	mg/Kg	J	Q, E
LEAD	9.17		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E
NICKEL	13.9		0.105	MDL	0.420	PQL	mg/Kg	J	Q, E
SILVER	0.0435	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.123	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	11.2		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** REA4 **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	155		0.287	MDL	1.06	PQL	mg/Kg	J	E, A

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.297		0.0637	MDL	0.212	PQL	mg/Kg	J	Q, 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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-089-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 2:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.50		0.0637	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.654		0.0170	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.664		0.0382	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	38.6		0.127	MDL	0.424	PQL	mg/Kg	J	Q
COBALT	7.96		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E
LEAD	34.0		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E
NICKEL	19.8		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E
SILVER	0.0831	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.320	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.606		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	147		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-092-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:27:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0680	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	8.56		0.0669	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.867		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.285		0.0401	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	43.1		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	12.3		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0736	MDL	0.446	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	12.7		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	23.3		0.111	MDL	0.446	PQL	mg/Kg	J	Q, E
SILVER	0.0392	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.273	J	0.0446	MDL	0.446	PQL	mg/Kg	J	Z

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.455		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	163		0.120	MDL	0.446	PQL	mg/Kg	J	E, A

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0708	J	0.0669	MDL	0.223	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	8.89		0.0669	MDL	0.446	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.976		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.252		0.0401	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	45.8		0.134	MDL	0.446	PQL	mg/Kg	J	Q
COBALT	14.0		0.0223	MDL	0.111	PQL	mg/Kg	J	Q, E
COPPER	19.4		0.0736	MDL	0.446	PQL	mg/Kg	J	Q, E
LEAD	13.6		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E
NICKEL	23.7		0.111	MDL	0.446	PQL	mg/Kg	J	Q, E
SILVER	0.0321	J	0.0134	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.152	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.26		0.0548	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.118	MDL	0.438	PQL	mg/Kg	J	E, A

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.0657	U	0.0657	MDL	0.219	PQL	mg/Kg	R	Q
ARSENIC	7.15		0.0657	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.869		0.0175	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.200		0.0394	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	30.4		0.131	MDL	0.438	PQL	mg/Kg	J	Q
COBALT	8.20		0.0219	MDL	0.110	PQL	mg/Kg	J	Q, E
COPPER	13.1		0.0723	MDL	0.438	PQL	mg/Kg	J	Q, E
LEAD	9.99		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E
NICKEL	18.1		0.110	MDL	0.438	PQL	mg/Kg	J	Q, E
SILVER	0.0876	J	0.0131	MDL	0.110	PQL	mg/Kg	J	Z, Q

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.160	J	0.0417	MDL	0.417	PQL	mg/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.843		0.0521	MDL	0.104	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	130		0.113	MDL	0.417	PQL	mg/Kg	J	E, A

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.152	J	0.0625	MDL	0.208	PQL	mg/Kg	J	Z, Q, Q, E
ARSENIC	5.85		0.0625	MDL	0.417	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.538		0.0167	MDL	0.104	PQL	mg/Kg	J	Q, E
CADMIUM	0.377		0.0375	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	27.9		0.125	MDL	0.417	PQL	mg/Kg	J	Q
COBALT	8.08		0.0208	MDL	0.104	PQL	mg/Kg	J	Q, E
COPPER	14.7		0.0688	MDL	0.417	PQL	mg/Kg	J	Q, E
LEAD	10.6		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E
NICKEL	16.9		0.104	MDL	0.417	PQL	mg/Kg	J	Q, E
SILVER	0.0265	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z, Q

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.164	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.834		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	167		0.114	MDL	0.422	PQL	mg/Kg	J	E, A

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.120	J	0.0633	MDL	0.211	PQL	mg/Kg	J	Z, Q, 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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.79		0.0633	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.915		0.0169	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.902		0.0380	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	38.1		0.127	MDL	0.422	PQL	mg/Kg	J	Q
COBALT	9.42		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, E
COPPER	24.2		0.0696	MDL	0.422	PQL	mg/Kg	J	Q, E
LEAD	15.3		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E
NICKEL	24.4		0.105	MDL	0.422	PQL	mg/Kg	J	Q, E
SILVER	3.63		0.0127	MDL	0.105	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 7199 **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
HEXAVALENT CHROMIUM	0.76	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z, FD

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
HEXAVALENT CHROMIUM	0.70	J	0.24	MDL	1.2	PQL	mg/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
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.21	U	0.21	MDL	1.1	PQL	mg/Kg	UJ	FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

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
HEXAVALENT CHROMIUM	0.36	J	0.21	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.47	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.51	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.86	J	0.22	MDL	1.1	PQL	mg/Kg	J	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
HEXAVALENT CHROMIUM	0.91	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.41	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.47	J	0.21	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.58	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

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

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
HEXAVALENT CHROMIUM	0.39	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.59	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

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

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
MERCURY	0.0380	J	0.0031	MDL	0.110	PQL	mg/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
MERCURY	0.0222	J	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

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
MERCURY	0.0049	J	0.0030	MDL	0.105	PQL	mg/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
MERCURY	0.0039	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

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
MERCURY	0.0873	J	0.0029	MDL	0.100	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

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
MERCURY	0.0132	J	0.0028	MDL	0.0993	PQL	mg/Kg	J	Z

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
MERCURY	0.0204	J	0.0030	MDL	0.104	PQL	mg/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
MERCURY	0.0066	J	0.0029	MDL	0.101	PQL	mg/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
MERCURY	0.0142	J	0.0031	MDL	0.108	PQL	mg/Kg	J	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
MERCURY	0.0414	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

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
MERCURY	0.0086	J	0.0030	MDL	0.106	PQL	mg/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
MERCURY	0.0098	J	0.0029	MDL	0.101	PQL	mg/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
MERCURY	0.0341	J	0.0028	MDL	0.0993	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

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

Method Category: SVOA
Method: 8081A **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.29	J	0.19	MDL	0.92	PQL	ug/Kg	J	Z

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIELDRIN	0.24	U	0.24	MDL	0.36	PQL	ug/Kg	R	Q
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	Q
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	R	Q

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.74	J	0.33	MDL	0.90	PQL	ug/Kg	J	Z

Method Category: SVOA
Method: 8082 **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *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 1248	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	FD
AROCLOR 1254	2.1		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1260	3.9		0.35	MDL	1.8	PQL	ug/Kg	J	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	2.6	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	11	U	11	MDL	37	PQL	ug/Kg	UJ	L
Aroclor 5442	11	U	11	MDL	37	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	170		11	MDL	37	PQL	ug/Kg	J	L

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.4	U	2.4	MDL	7.9	PQL	ug/Kg	UJ	L
Aroclor 5442	2.4	U	2.4	MDL	7.9	PQL	ug/Kg	UJ	L
Aroclor 5460	6.7	J	2.4	MDL	7.9	PQL	ug/Kg	J	Z, L

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 9:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	8.4	J	1.8	MDL	9.4	PQL	ug/Kg	J	Z
AROCLOR 1260	5.3	J	1.8	MDL	9.4	PQL	ug/Kg	J	Z
Aroclor 5432	5.6	U	5.6	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.6	U	5.6	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	9.3	J	5.6	MDL	18	PQL	ug/Kg	J	Z, L

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
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	4.2		1.1	MDL	3.6	PQL	ug/Kg	J	L

Sample ID: SL-071-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:09:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	6.7		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1254	13		0.35	MDL	1.8	PQL	ug/Kg	J	FD
AROCLOR 1260	8.5		0.35	MDL	1.8	PQL	ug/Kg	J	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	4.3		1.1	MDL	3.5	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:48:00 *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	6.8		0.70	MDL	3.6	PQL	ug/Kg	J	S
AROCLOR 1260	22		0.70	MDL	3.6	PQL	ug/Kg	J	S
Aroclor 5432	2.1	U	2.1	MDL	7.0	PQL	ug/Kg	UJ	L
Aroclor 5442	2.1	U	2.1	MDL	7.0	PQL	ug/Kg	UJ	L
Aroclor 5460	27		2.1	MDL	7.0	PQL	ug/Kg	J	S, L

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
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	5.6		1.1	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	4.5	J	1.8	MDL	9.3	PQL	ug/Kg	J	Z
AROCLOR 1254	4.8	J	1.8	MDL	9.3	PQL	ug/Kg	J	Z
Aroclor 5432	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	8.9	J	5.4	MDL	18	PQL	ug/Kg	J	Z, L

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
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-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	1.7	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **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
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-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* RES *Dilution:* 1000

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1100	U	1100	MDL	3600	PQL	ug/Kg	UJ	L
Aroclor 5442	1100	U	1100	MDL	3600	PQL	ug/Kg	UJ	L
Aroclor 5460	1100	U	1100	MDL	3600	PQL	ug/Kg	UJ	L

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
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-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
AROCLOR 1248	5.2		0.35	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1254	3.6		0.35	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1260	1.7	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, S
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	1.7	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	6.6	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
Aroclor 5432	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	6.6	J	5.4	MDL	18	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

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
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-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.6	U	5.6	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5442	5.6	U	5.6	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5460	5.6	U	5.6	MDL	19	PQL	ug/Kg	UJ	L

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	57	U	57	MDL	190	PQL	ug/Kg	UJ	L
Aroclor 5442	57	U	57	MDL	190	PQL	ug/Kg	UJ	L
Aroclor 5460	57	U	57	MDL	190	PQL	ug/Kg	UJ	L

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:10:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.3	U	5.3	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.3	U	5.3	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	5.3	U	5.3	MDL	18	PQL	ug/Kg	UJ	L

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	11	U	11	MDL	36	PQL	ug/Kg	UJ	L
Aroclor 5442	11	U	11	MDL	36	PQL	ug/Kg	UJ	L
Aroclor 5460	110		11	MDL	36	PQL	ug/Kg	J	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *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	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

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
2,4,5-T	0.33		0.091	MDL	0.19	PQL	ug/Kg	J	S
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

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
2,4-D	3.0	J	1.4	MDL	4.3	PQL	ug/Kg	J	Z
DICAMBA	0.78	J	0.48	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.96	U	0.96	MDL	2.9	PQL	ug/Kg	R	L

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
DICAMBA	0.69	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SED-040-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 10:19:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

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
DALAPON	4.7	U	4.7	MDL	9.6	PQL	ug/Kg	R	Q
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

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
2,4-D	1.4	J	1.3	MDL	3.8	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-072-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-073-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

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
2,4-D	1.9	J	1.3	MDL	3.9	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L
MCPA	230	J	83	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:28:00 *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	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	130	J	80	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:49:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	4.3	U	4.3	MDL	13	PQL	ug/Kg	R	L

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *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
MCPA	250	J	83	MDL	270	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

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
2,4,5-T	0.088	J	0.088	MDL	0.18	PQL	ug/Kg	J	Z
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

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
DICAMBA	0.45	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.88	U	0.88	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP04-SA5B-QC-121310 *Collected:* 12/13/2010 10:15:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L
BENZO(A)ANTHRACENE	30	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	60	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	33	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	24	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	29	J	18	MDL	350	PQL	ug/Kg	J	Z, FD
CHRYSENE	46	J	18	MDL	180	PQL	ug/Kg	J	Z
FLUORANTHENE	64	J	18	MDL	180	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	27	J	18	MDL	180	PQL	ug/Kg	J	Z
PHENANTHRENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	70	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SED-029-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	110	J	18	MDL	370	PQL	ug/Kg	J	Z
Butylbenzylphthalate	31	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 11:13:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
3,3'-DICHLOROBENZIDINE	120	U	120	MDL	400	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	56	J	20	MDL	400	PQL	ug/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	38	J	19	MDL	370	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SED-040-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 10:19:00 ***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	360	PQL	ug/Kg	UJ	L

Sample ID: SL-071-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 10:09:00 ***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	360	PQL	ug/Kg	UJ	L
BENZIDINE	1200	U	1200	MDL	3600	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	18	U	18	MDL	360	PQL	ug/Kg	UJ	FD

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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	350	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	39	J	18	MDL	350	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L

Sample ID: SL-074-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	41	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-076-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:28:00 ***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	350	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	18	MDL	350	PQL	ug/Kg	J	Z
PYRENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	370	PQL	ug/Kg	UJ	L

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *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
BIS(2-ETHYLHEXYL)PHTHALATE	25	J	18	MDL	360	PQL	ug/Kg	J	Z
FLUORANTHENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	23	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	110	U	110	MDL	350	PQL	ug/Kg	UJ	L

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	360	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	330	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *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-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *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	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *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	380	PQL	ug/Kg	UJ	L

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
3,3'-DICHLOROBENZIDINE	110	U	110	MDL	350	PQL	ug/Kg	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	28	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-301-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 9:00:00 *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
BENZO(A)PYRENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	29	J	18	MDL	180	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	18	J	18	MDL	180	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	26	J	18	MDL	370	PQL	ug/Kg	J	Z
PYRENE	21	J	18	MDL	180	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8270C SIM **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-METHYLNAPHTHALENE	0.74	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD
2-METHYLNAPHTHALENE	0.87	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.75	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
ANTHRACENE	1.6	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, FD
DIBENZO(A,H)ANTHRACENE	2.6		0.71	MDL	1.8	PQL	ug/Kg	J	FD
Di-n-butylphthalate	6.7	J	6.4	MDL	19	PQL	ug/Kg	J	Z, FD
NAPHTHALENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, FD

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SED-029-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 11:52:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	4.4	J	3.7	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	9.6	J	7.4	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	9.6	J	7.4	MDL	18	PQL	ug/Kg	J	Z
Di-n-octylphthalate	97	J	66	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SED-030-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 11:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	1.6	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.3	J	7.2	MDL	22	PQL	ug/Kg	J	Z
FLUORANTHENE	1.4	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.83	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	0.89	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SED-031-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 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
ANTHRACENE	0.43	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.99	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.85	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.2	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Di-n-butylphthalate	13	J	6.7	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.74	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SED-040-SIV-SD-0.0-0.5 ***Collected:*** 12/13/2010 10:19:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.38	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.84	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.79	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.73	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.3	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8270C SIM **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
1-METHYLNAPHTHALENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	FD
2-METHYLNAPHTHALENE	0.74	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	18		0.36	MDL	1.8	PQL	ug/Kg	J	Q, FD
ANTHRACENE	6.9		0.36	MDL	1.8	PQL	ug/Kg	J	FD
BENZO(A)ANTHRACENE	73		0.71	MDL	1.8	PQL	ug/Kg	J	Q
BENZO(K)FLUORANTHENE	91		0.71	MDL	1.8	PQL	ug/Kg	J	Q
DIBENZO(A,H)ANTHRACENE	55		0.71	MDL	1.8	PQL	ug/Kg	J	Q, FD
Di-n-butylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	FD
NAPHTHALENE	3.3		0.71	MDL	1.8	PQL	ug/Kg	J	FD
PHENANTHRENE	54		0.71	MDL	1.8	PQL	ug/Kg	J	Q
PYRENE	85		0.71	MDL	1.8	PQL	ug/Kg	J	Q

Sample ID: SL-072-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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	0.62	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.96	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.96	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-073-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	13	J	7.0	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	16	J	7.0	MDL	18	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	12	J	7.0	MDL	18	PQL	ug/Kg	J	Z
PYRENE	17	J	7.0	MDL	18	PQL	ug/Kg	J	Z

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-METHYLNAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.58	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.0	J	6.5	MDL	20	PQL	ug/Kg	J	Z
FLUORENE	0.80	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: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-074-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
NAPHTHALENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-078-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	9.7	J	7.4	MDL	18	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	11	J	7.4	MDL	18	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	16	J	7.4	MDL	18	PQL	ug/Kg	J	Z
CHRYSENE	17	J	3.7	MDL	18	PQL	ug/Kg	J	Z
FLUORANTHENE	16	J	7.4	MDL	18	PQL	ug/Kg	J	Z
PYRENE	13	J	7.4	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-083-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
ACENAPHTHENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.3	J	6.5	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	0.78	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-084-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:46:00 *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	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.78	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-086-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
CHRYSENE	0.45	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.89	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-089-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DIBENZO(A,H)ANTHRACENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	10	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-092-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:27:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
NAPHTHALENE	0.78	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-103-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:25:00 *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(A)PYRENE	0.88	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.96	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
NAPHTHALENE	0.91	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-139-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 11:04:00 *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)ANTHRACENE	0.89	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	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	9.6	J	6.8	MDL	21	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DIBENZO(A,H)ANTHRACENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	6.4	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-octylphthalate	11	J	6.4	MDL	19	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.71	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: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-236-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
INDENO(1,2,3-CD)PYRENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

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-METHYLNAPHTHALENE	1.2	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
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
DIBENZO(A,H)ANTHRACENE	1.7	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	7.4	J	6.6	MDL	20	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_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: DE036 **Laboratory: LL**

EDD Filename: DE036_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: DE036 **Laboratory: LL**

EDD Filename: DE036_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

DE036

Method Blank Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35108DB222357	12/20/2010 11:57:00 PM	ALUMINUM CALCIUM PHOSPHORUS STRONTIUM TIN	7.29 mg/Kg 12.8 mg/Kg 1.08 mg/Kg 0.0650 mg/Kg 1.20 mg/Kg	DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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-301-SA5B-SS-0.0-0.5
P35408EB221919	12/21/2010 7:19:00 PM	ALUMINUM CALCIUM PHOSPHORUS TIN	5.43 mg/Kg 12.3 mg/Kg 1.70 mg/Kg 1.37 mg/Kg	SL-236-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
DUP04-SA5B-QC-121310(RES)	TIN	2.42 mg/Kg	2.42U mg/Kg
SED-029-SIV-SD-0.0-0.5(RES)	TIN	2.05 mg/Kg	2.05U mg/Kg
SED-030-SIV-SD-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SED-031-SIV-SD-0.0-0.5(RES)	TIN	2.03 mg/Kg	2.03U mg/Kg
SED-040-SIV-SD-0.0-0.5(RES)	TIN	1.82 mg/Kg	1.82U mg/Kg
SL-071-SA5B-SS-0.0-0.5(RES)	TIN	2.40 mg/Kg	2.40U mg/Kg
SL-072-SA5B-SS-0.0-0.5(RES)	TIN	2.20 mg/Kg	2.20U mg/Kg
SL-073-SA5B-SS-0.0-0.5(RES)	TIN	2.03 mg/Kg	2.03U mg/Kg
SL-074-SA5B-SS-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SL-076-SA5B-SS-0.0-0.5(RES)	TIN	2.39 mg/Kg	2.39U mg/Kg
SL-078-SA5B-SS-0.0-0.5(RES)	TIN	2.09 mg/Kg	2.09U mg/Kg
SL-083-SA5B-SS-0.0-0.5(RES)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-084-SA5B-SS-0.0-0.5(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-086-SA5B-SS-0.0-0.5(RES)	TIN	1.98 mg/Kg	1.98U mg/Kg
SL-089-SA5B-SS-0.0-0.5(RES)	TIN	2.20 mg/Kg	2.20U mg/Kg
SL-092-SA5B-SS-0.0-0.5(RES)	TIN	2.05 mg/Kg	2.05U mg/Kg
SL-103-SA5B-SS-0.0-0.5(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-139-SA5B-SS-0.0-0.5(RES)	TIN	2.72 mg/Kg	2.72U mg/Kg
SL-236-SA5B-SS-0.0-0.5(REA3)	TIN	2.25 mg/Kg	2.25U mg/Kg
SL-301-SA5B-SS-0.0-0.5(RES)	TIN	3.24 mg/Kg	3.24U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory:** LL

EDD Filename: DE036_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35126BB220903A	12/26/2010 9:03:00 AM	COPPER	0.242 mg/Kg	DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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

Method: 6850
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
BlankB241840A	12/21/2010 6:40:00 PM	PERCHLORATE	7.0 ug/Kg	SL-071-SA5B-SS-0.0-0.5 SL-236-SA5B-SS-0.0-0.5

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLH35B261033	12/23/2010 10:33:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	8.2 ug/Kg	DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_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-071-SA5B-SS-0.0-0.5MS (SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 SL-139-SA5B-SS-0.0-0.5 SL-301-SA5B-SS-0.0-0.5)	FLUORIDE	78	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	4,4'-DDT ALDRIN	- 132	245 -	10.00-176.00 16.00-126.00	- -	4,4'-DDT ALDRIN	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)	DIELDRIN ENDRIN HEPTACHLOR	0 0 0	- - -	19.00-154.00 11.00-149.00 13.00-126.00	200 (50.00) 200 (50.00) 200 (50.00)	DIELDRIN ENDRIN HEPTACHLOR	J(all detects) R(all non-detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	2,4,5-T 2,4-DB DICAMBA	- - 154	- - 127	25.00-132.00 20.00-170.00 33.00-120.00	68 (35.00) 62 (50.00) -	2,4,5-T 2,4-DB DICAMBA	J(all detects)
SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	DALAPON	-	0	12.00-86.00	200 (50.00)	DALAPON	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-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	2,4-DINITROPHENOL BENZOIC ACID	- -	- -	20.00-143.00 10.00-173.00	47 (30.00) 31 (30.00)	2,4-DINITROPHENOL BENZOIC ACID	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)	BENZIDINE	16	20	35.00-141.00	-	BENZIDINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_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-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	BENZO(A)ANTHRACENE	-87	-90	39.00-144.00	-	BENZO(A)ANTHRACENE	J(all detects) R(all non-detects)
	BENZO(A)PYRENE	-461	-441	34.00-156.00	-	BENZO(A)PYRENE	
	BENZO(B)FLUORANTHENE	-1536	-1472	43.00-155.00	-	BENZO(B)FLUORANTHENE	
	BENZO(G,H,I)PERYLENE	-401	-387	33.00-141.00	-	BENZO(G,H,I)PERYLENE	
	BENZO(K)FLUORANTHENE	-148	-137	42.00-144.00	-	BENZO(K)FLUORANTHENE	Fluoranthene, Chrysene, Benzo(b)fluoranthene, Benzo(a)pyrene, Indeno(123-cd)pyrene, Benzo(ghi)perylene No Qual, >4x
	CHRYSENE	-1058	-999	29.00-156.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	-49	-47	41.00-130.00	-	DIBENZO(A,H)ANTHRACENE	
	FLUORANTHENE	-326	-323	26.00-166.00	-	FLUORANTHENE	
	INDENO(1,2,3-CD)PYRENE	-643	-617	21.00-143.00	-	INDENO(1,2,3-CD)PYRENE	
	PHENANTHRENE	-43	-40	12.00-165.00	-	PHENANTHRENE	
	PYRENE	-111	-113	15.00-153.00	-	PYRENE	
SL-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (SL-071-SA5B-SS-0.0-0.5)	ACENAPHTHYLENE	49	52	55.00-126.00	-	ACENAPHTHYLENE	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-071-SA5B-SS-0.0-0.5MS SL-071-SA5B-SS-0.0-0.5MSD (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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)	ARSENIC	188	166	75.00-125.00	-	ARSENIC	
	BERYLLIUM	146	142	75.00-125.00	-	BERYLLIUM	
	CADMIUM	133	139	75.00-125.00	-	CADMIUM	
	CHROMIUM	160	157	75.00-125.00	-	CHROMIUM	
	COBALT	127	126	75.00-125.00	-	COBALT	
	COPPER	138	151	75.00-125.00	-	COPPER	
	LEAD	179	193	75.00-125.00	-	LEAD	
	NICKEL	136	143	75.00-125.00	-	NICKEL	
	SILVER	-	129	75.00-125.00	-	SILVER	
	VANADIUM	204	201	75.00-125.00	-	VANADIUM	
	ZINC	222	321	75.00-125.00	-	ZINC	J(all detects) V, Zn No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_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-071-SA5B-SS-0.0-0.5MS **SL-071-SA5B-SS-0.0-0.5MSD** (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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)	ANTIMONY	40	20	75.00-125.00	56 (20.00)	ANTIMONY	J(all detects) R(all non-detects)
SL-071-SA5B-SS-0.0-0.5MS **SL-071-SA5B-SS-0.0-0.5MSD** (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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)	MOLYBDENUM	134	134	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-071-SA5B-SS-0.0-0.5MS **SL-071-SA5B-SS-0.0-0.5MSD** (DUP04-SA5B-QC-121310 SED-029-SIV-SD-0.0-0.5 SED-030-SIV-SD-0.0-0.5 SED-031-SIV-SD-0.0-0.5 SED-040-SIV-SD-0.0-0.5 SL-071-SA5B-SS-0.0-0.5 SL-072-SA5B-SS-0.0-0.5 SL-073-SA5B-SS-0.0-0.5 SL-074-SA5B-SS-0.0-0.5 SL-076-SA5B-SS-0.0-0.5 SL-078-SA5B-SS-0.0-0.5 SL-083-SA5B-SS-0.0-0.5 SL-084-SA5B-SS-0.0-0.5 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)	BARIUM	313	247	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: DE036 Laboratory: LL

EDD Filename: DE036_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-071-SA5B-SS-0.0-0.5MS	ALUMINUM	1507	1477	75.00-125.00	-	ALUMINUM	
SL-071-SA5B-SS-0.0-0.5MSD	CALCIUM	167	189	75.00-125.00	-	CALCIUM	
(DUP04-SA5B-QC-121310	IRON	1042	1161	75.00-125.00	-	IRON	
SED-029-SIV-SD-0.0-0.5	MAGNESIUM	265	220	75.00-125.00	-	MAGNESIUM	
SED-030-SIV-SD-0.0-0.5	MANGANESE	149	139	75.00-125.00	-	MANGANESE	
SED-031-SIV-SD-0.0-0.5							
SED-040-SIV-SD-0.0-0.5							
SL-071-SA5B-SS-0.0-0.5							
SL-072-SA5B-SS-0.0-0.5							
SL-073-SA5B-SS-0.0-0.5							
SL-074-SA5B-SS-0.0-0.5							No Qual, >4x
SL-076-SA5B-SS-0.0-0.5							
SL-078-SA5B-SS-0.0-0.5							
SL-083-SA5B-SS-0.0-0.5							
SL-084-SA5B-SS-0.0-0.5							
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-301-SA5B-SS-0.0-0.5)							
SL-071-SA5B-SS-0.0-0.5MS	TITANIUM	445	352	75.00-125.00	-	TITANIUM	
SL-071-SA5B-SS-0.0-0.5MSD							
(DUP04-SA5B-QC-121310							
SED-029-SIV-SD-0.0-0.5							
SED-030-SIV-SD-0.0-0.5							
SED-031-SIV-SD-0.0-0.5							
SED-040-SIV-SD-0.0-0.5							
SL-071-SA5B-SS-0.0-0.5							
SL-072-SA5B-SS-0.0-0.5							
SL-073-SA5B-SS-0.0-0.5							
SL-074-SA5B-SS-0.0-0.5							No Qual, >4x
SL-076-SA5B-SS-0.0-0.5							
SL-078-SA5B-SS-0.0-0.5							
SL-083-SA5B-SS-0.0-0.5							
SL-084-SA5B-SS-0.0-0.5							
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-301-SA5B-SS-0.0-0.5)							

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP (SL-071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 SL -139-SA5B-SS-0.0-0.5 SL -301-SA5B-SS-0.0-0.5)	FLUORIDE	24	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP (DUP04-SA5B-QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 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 -301-SA5B-SS-0.0-0.5)	Zirconium	52	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP	ANTIMONY	200	20.00	
(DUP04-SA5B-QC-121310	ARSENIC	23	20.00	
SED -029-SIV-SD-0.0-0.5	BARIUM	28	20.00	
SED -030-SIV-SD-0.0-0.5	BERYLLIUM	43	20.00	
SED -031-SIV-SD-0.0-0.5	CADMIUM	25	20.00	
SED -040-SIV-SD-0.0-0.5	COBALT	22	20.00	
SL -071-SA5B-SS-0.0-0.5	COPPER	33	20.00	
SL -072-SA5B-SS-0.0-0.5	LEAD	37	20.00	
SL -073-SA5B-SS-0.0-0.5	NICKEL	31	20.00	
SL -074-SA5B-SS-0.0-0.5	SILVER	47	20.00	
SL -076-SA5B-SS-0.0-0.5				J(all detects) UJ(all non-detects)
SL -078-SA5B-SS-0.0-0.5				
SL -083-SA5B-SS-0.0-0.5				Sb, Cd, Ag
SL -084-SA5B-SS-0.0-0.5				No Qual
SL -086-SA5B-SS-0.0-0.5				OK by difference
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)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-071-SA5B-SS-0.0-0.5DUP	HEXAVALENT CHROMIUM	200	20.00	
(DUP04-SA5B-QC-121310				
SED -029-SIV-SD-0.0-0.5				
SED -030-SIV-SD-0.0-0.5				
SED -031-SIV-SD-0.0-0.5				
SED -040-SIV-SD-0.0-0.5				
SL -071-SA5B-SS-0.0-0.5				
SL -072-SA5B-SS-0.0-0.5				
SL -073-SA5B-SS-0.0-0.5				
SL -074-SA5B-SS-0.0-0.5				No Qual
SL -076-SA5B-SS-0.0-0.5				OK by difference
SL -078-SA5B-SS-0.0-0.5				
SL -083-SA5B-SS-0.0-0.5				
SL -084-SA5B-SS-0.0-0.5				
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)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 6850
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSQ241847A (SL-071-SA5B-SS-0.0-0.5 SL -236-SA5B-SS-0.0-0.5)	PERCHLORATE	120	-	85.00-115.00	-	PERCHLORATE	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03510AQ240131A (DUP04 -SA5B-QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 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)	METHOXYCHLOR	130	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03511AY241635A (DUP04 -SA5B-QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B-SS-0.0-0.5 SL -072-SA5B-SS-0.0-0.5 SL -073-SA5B-SS-0.0-0.5 SL -074-SA5B-SS-0.0-0.5 SL -076-SA5B-SS-0.0-0.5 SL -078-SA5B-SS-0.0-0.5 SL -083-SA5B-SS-0.0-0.5 SL -084-SA5B-SS-0.0-0.5 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)	Aroclor 5442	-	74	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

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03557AQ241952A (DUP04 -SA5B -QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B -SS-0.0-0.5 SL -072-SA5B -SS-0.0-0.5 SL -073-SA5B -SS-0.0-0.5 SL -074-SA5B -SS-0.0-0.5 SL -076-SA5B -SS-0.0-0.5 SL -078-SA5B -SS-0.0-0.5 SL -083-SA5B -SS-0.0-0.5 SL -084-SA5B -SS-0.0-0.5 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)	DINOSEB	6	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8270C
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0LGLCSQ261059 (DUP04 -SA5B -QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B -SS-0.0-0.5 SL -072-SA5B -SS-0.0-0.5 SL -073-SA5B -SS-0.0-0.5 SL -074-SA5B -SS-0.0-0.5 SL -076-SA5B -SS-0.0-0.5 SL -078-SA5B -SS-0.0-0.5 SL -083-SA5B -SS-0.0-0.5 SL -084-SA5B -SS-0.0-0.5 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)	3,3'-DICHLOROBENZIDINE	31	-	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: DE036 Laboratory: LL

EDD Filename: DE036_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
P35126BQ220906A (DUP04 -SA5B -QC-121310 SED -029-SIV-SD-0.0-0.5 SED -030-SIV-SD-0.0-0.5 SED -031-SIV-SD-0.0-0.5 SED -040-SIV-SD-0.0-0.5 SL -071-SA5B -SS-0.0-0.5 SL -072-SA5B -SS-0.0-0.5 SL -073-SA5B -SS-0.0-0.5 SL -074-SA5B -SS-0.0-0.5 SL -076-SA5B -SS-0.0-0.5 SL -078-SA5B -SS-0.0-0.5 SL -083-SA5B -SS-0.0-0.5 SL -084-SA5B -SS-0.0-0.5 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)	ANTIMONY	55	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-139-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	251	20.00-120.00	All Target Analytes	No Qual Diluted Out

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-031-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	139	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-072-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	122	45.00-120.00	All Target Analytes	J(all detects)
SL-074-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	131	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-086-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	125	45.00-120.00	All Target Analytes	J(all detects)
SL-089-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	160	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-103-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	128	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-236-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	138	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-301-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	152	45.00-120.00	All Target Analytes	No Qual Diluted Out

Method: 8151A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-029-SIV-SD-0.0-0.5	2,4-Dichlorophenylacetic acid	173	36.00-156.00	All Target Analytes	J (all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_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: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
FLUORIDE	3.4	4.3	23	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
ALUMINUM	14400	14200	1	50.00	
BORON	4.15	5.32	25	50.00	
CALCIUM	2980	3040	2	50.00	
IRON	20700	20900	1	50.00	
LITHIUM	23.9	23.4	2	50.00	
MAGNESIUM	4490	4460	1	50.00	
MANGANESE	248	248	0	50.00	
PHOSPHORUS	377	394	4	50.00	No Qualifiers Applied
POTASSIUM	2680	2580	4	50.00	
SODIUM	109	102	7	50.00	
STRONTIUM	16.7	17.2	3	50.00	
TIN	2.40	2.42	1	50.00	
TITANIUM	1130	1150	2	50.00	
Zirconium	1.01	1.10	9	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
ANTIMONY	0.102	0.136	29	50.00	
ARSENIC	6.17	7.83	24	50.00	
BARIUM	120	135	12	50.00	
BERYLLIUM	0.693	0.771	11	50.00	
CHROMIUM	25.5	28.8	12	50.00	
COBALT	7.36	9.00	20	50.00	
COPPER	11.9	15.1	24	50.00	
LEAD	9.18	11.3	21	50.00	No Qualifiers Applied
MOLYBDENUM	0.620	0.750	19	50.00	
NICKEL	14.8	17.1	14	50.00	
SELENIUM	0.0935	0.152	48	50.00	
THALLIUM	0.356	0.324	9	50.00	
VANADIUM	44.9	50.3	11	50.00	
ZINC	98.5	128	26	50.00	
CADMIUM	0.210	0.382	58	50.00	J(all detects)
SILVER	0.241	1.22	134	50.00	

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

Field Duplicate RPD Report

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
HEXAVALENT CHROMIUM	1.1 U	0.76	200	50.00	J(all detects) UJ(all non-detects)

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (mg/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
MERCURY	0.334	0.227	38	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
Aroclor 5460	4.3	2.6	49	50.00	No Qualifiers Applied
AROCLOR 1248	6.7	1.8 U	200	50.00	J(all detects) UJ(all non-detects)
AROCLOR 1254	13	2.1	144	50.00	
AROCLOR 1260	8.5	3.9	74	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
2-METHYLNAPHTHALENE	0.74	0.87	16	50.00	No Qualifiers Applied
1-METHYLNAPHTHALENE	1.8 U	0.74	200	50.00	J(all detects) UJ(all non-detects)
ACENAPHTHYLENE	18	0.75	184	50.00	
ANTHRACENE	6.9	1.6	125	50.00	
DIBENZO(A,H)ANTHRACENE	55	2.6	182	50.00	
Di-n-butylphthalate	19 U	6.7	200	50.00	
NAPHTHALENE	3.3	1.1	100	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg) SL-071-SA5B-SS-0.0-0.5	Concentration (ug/Kg) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
BIS(2-ETHYLHEXYL)PHTHALATE	360 U	29	200	50.00	J(all detects) UJ(all non-detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit) SL-071-SA5B-SS-0.0-0.5	Concentration (pH unit) DUP04-SA5B-QC-121310	Sample RPD	eQAPP RPD	Flag
PH	7.67	7.34	4	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-071-SA5B-SS-0.0-0.5	DUP04-SA5B-QC-121310			
Oxidation Reduction Potential	462	454	2		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 Laboratory: LL

EDD Filename: DE036_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-073-SA5B-SS-0.0-0.5	FLUORIDE	J	0.87	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-086-SA5B-SS-0.0-0.5	PERCHLORATE	J	11.8	31.8	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	SODIUM	J	102	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.42	10.6	PQL	mg/Kg	
	Zirconium	J	1.10	5.31	PQL	mg/Kg	
SED-029-SIV-SD-0.0-0.5	BORON	J	4.76	5.32	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.8	106	PQL	mg/Kg	
	TIN	J	2.05	10.6	PQL	mg/Kg	
SED-030-SIV-SD-0.0-0.5	SODIUM	J	78.9	115	PQL	mg/Kg	J (all detects)
	TIN	J	2.34	11.5	PQL	mg/Kg	
	Zirconium	J	1.44	5.74	PQL	mg/Kg	
SED-031-SIV-SD-0.0-0.5	SODIUM	J	54.3	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.03	10.7	PQL	mg/Kg	
	Zirconium	J	0.920	5.34	PQL	mg/Kg	
SED-040-SIV-SD-0.0-0.5	BORON	J	5.27	5.35	PQL	mg/Kg	J (all detects)
	SODIUM	J	62.3	107	PQL	mg/Kg	
	TIN	J	1.82	10.7	PQL	mg/Kg	
	Zirconium	J	1.05	5.35	PQL	mg/Kg	
SL-071-SA5B-SS-0.0-0.5	BORON	J	4.15	5.23	PQL	mg/Kg	J (all detects)
	TIN	J	2.40	10.5	PQL	mg/Kg	
	Zirconium	J	1.01	5.23	PQL	mg/Kg	
SL-072-SA5B-SS-0.0-0.5	SODIUM	J	98.9	101	PQL	mg/Kg	J (all detects)
	TIN	J	2.20	10.1	PQL	mg/Kg	
	Zirconium	J	1.32	5.03	PQL	mg/Kg	
SL-073-SA5B-SS-0.0-0.5	BORON	J	4.90	5.05	PQL	mg/Kg	J (all detects)
	SODIUM	J	87.5	101	PQL	mg/Kg	
	TIN	J	2.03	10.1	PQL	mg/Kg	
	Zirconium	J	1.75	5.05	PQL	mg/Kg	
SL-074-SA5B-SS-0.0-0.5	BORON	J	4.88	5.19	PQL	mg/Kg	J (all detects)
	TIN	J	2.34	10.4	PQL	mg/Kg	
	Zirconium	J	1.49	5.19	PQL	mg/Kg	
SL-076-SA5B-SS-0.0-0.5	BORON	J	2.78	5.26	PQL	mg/Kg	J (all detects)
	TIN	J	2.39	10.5	PQL	mg/Kg	
SL-078-SA5B-SS-0.0-0.5	BORON	J	3.77	5.30	PQL	mg/Kg	J (all detects)
	TIN	J	2.09	10.6	PQL	mg/Kg	
	Zirconium	J	1.26	5.30	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 | Laboratory: LL

EDD Filename: DE036_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-083-SA5B-SS-0.0-0.5	BORON	J	4.46	5.16	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.9	103	PQL	mg/Kg	
	TIN	J	2.24	10.3	PQL	mg/Kg	
	Zirconium	J	1.82	5.16	PQL	mg/Kg	
SL-084-SA5B-SS-0.0-0.5	BORON	J	3.91	5.42	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.4	108	PQL	mg/Kg	
	TIN	J	2.45	10.8	PQL	mg/Kg	
	Zirconium	J	1.39	5.42	PQL	mg/Kg	
SL-086-SA5B-SS-0.0-0.5	SODIUM	J	71.0	103	PQL	mg/Kg	J (all detects)
	TIN	J	1.98	10.3	PQL	mg/Kg	
	Zirconium	J	1.95	5.15	PQL	mg/Kg	
SL-089-SA5B-SS-0.0-0.5	TIN	J	2.20	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.43	5.20	PQL	mg/Kg	
SL-092-SA5B-SS-0.0-0.5	TIN	J	2.05	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.79	5.57	PQL	mg/Kg	
SL-103-SA5B-SS-0.0-0.5	TIN	J	2.33	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.02	5.47	PQL	mg/Kg	
SL-139-SA5B-SS-0.0-0.5	TIN	J	2.72	11.2	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.64	5.58	PQL	mg/Kg	
SL-236-SA5B-SS-0.0-0.5	TIN	J	2.25	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.19	5.26	PQL	mg/Kg	
SL-301-SA5B-SS-0.0-0.5	BORON	J	4.44	5.32	PQL	mg/Kg	J (all detects)
	TIN	J	3.24	10.6	PQL	mg/Kg	
	Zirconium	J	1.67	5.32	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	ANTIMONY	J	0.136	0.208	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.152	0.417	PQL	mg/Kg	
SED-029-SIV-SD-0.0-0.5	ANTIMONY	J	0.191	0.217	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.144	0.434	PQL	mg/Kg	
SED-030-SIV-SD-0.0-0.5	ANTIMONY	J	0.115	0.239	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.209	0.478	PQL	mg/Kg	
	SILVER	J	0.0806	0.119	PQL	mg/Kg	
SED-031-SIV-SD-0.0-0.5	SELENIUM	J	0.151	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0557	0.110	PQL	mg/Kg	
SED-040-SIV-SD-0.0-0.5	SELENIUM	J	0.129	0.436	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0217	0.109	PQL	mg/Kg	
SL-071-SA5B-SS-0.0-0.5	ANTIMONY	J	0.102	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0935	0.423	PQL	mg/Kg	
SL-072-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0917	0.203	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.114	0.406	PQL	mg/Kg	
SL-073-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0768	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.138	0.412	PQL	mg/Kg	
SL-074-SA5B-SS-0.0-0.5	SELENIUM	J	0.315	0.431	PQL	mg/Kg	J (all detects)
SL-076-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0842	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.133	0.425	PQL	mg/Kg	
	SILVER	J	0.0363	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 | Laboratory: LL

EDD Filename: DE036_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-078-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM	J J	0.149 0.179	0.216 0.432	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-083-SA5B-SS-0.0-0.5	SELENIUM	J	0.176	0.421	PQL	mg/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.203 0.0361	0.438 0.109	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.140 0.0435	0.420 0.105	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.123 0.0831	0.424 0.106	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-092-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.0680 0.320 0.0392	0.223 0.446 0.111	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-103-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.0708 0.273 0.0321	0.223 0.446 0.111	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-139-SA5B-SS-0.0-0.5	SELENIUM SILVER	J J	0.152 0.0876	0.438 0.110	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM SILVER	J J J	0.152 0.160 0.0265	0.208 0.417 0.104	PQL PQL PQL	mg/Kg mg/Kg mg/Kg	J (all detects)
SL-301-SA5B-SS-0.0-0.5	ANTIMONY SELENIUM	J J	0.120 0.164	0.211 0.422	PQL PQL	mg/Kg mg/Kg	J (all detects)

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	HEXAVALENT CHROMIUM	J	0.76	1.1	PQL	mg/Kg	J (all detects)
SED-030-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.2	PQL	mg/Kg	J (all detects)
SED-040-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-073-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.51	1.1	PQL	mg/Kg	J (all detects)
SL-078-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.86	1.1	PQL	mg/Kg	J (all detects)
SL-083-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.91	1.1	PQL	mg/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.41	1.1	PQL	mg/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-092-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.39	1.1	PQL	mg/Kg	J (all detects)
SL-139-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-029-SIV-SD-0.0-0.5	MERCURY	J	0.0380	0.110	PQL	mg/Kg	J (all detects)
SED-030-SIV-SD-0.0-0.5	MERCURY	J	0.0222	0.113	PQL	mg/Kg	J (all detects)
SED-031-SIV-SD-0.0-0.5	MERCURY	J	0.0049	0.105	PQL	mg/Kg	J (all detects)
SED-040-SIV-SD-0.0-0.5	MERCURY	J	0.0039	0.107	PQL	mg/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	MERCURY	J	0.0873	0.100	PQL	mg/Kg	J (all detects)
SL-073-SA5B-SS-0.0-0.5	MERCURY	J	0.0132	0.0993	PQL	mg/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	MERCURY	J	0.0204	0.104	PQL	mg/Kg	J (all detects)
SL-076-SA5B-SS-0.0-0.5	MERCURY	J	0.0066	0.101	PQL	mg/Kg	J (all detects)
SL-078-SA5B-SS-0.0-0.5	MERCURY	J	0.0142	0.108	PQL	mg/Kg	J (all detects)
SL-083-SA5B-SS-0.0-0.5	MERCURY	J	0.0414	0.101	PQL	mg/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	MERCURY	J	0.0086	0.106	PQL	mg/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	MERCURY	J	0.0098	0.101	PQL	mg/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	MERCURY	J	0.0341	0.0993	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-029-SIV-SD-0.0-0.5	ALPHA-BHC	J	0.29	0.92	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	BETA-BHC	J	0.74	0.90	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	Aroclor 5460	J	2.6	3.5	PQL	ug/Kg	J (all detects)
SED-030-SIV-SD-0.0-0.5	Aroclor 5460	J	6.7	7.9	PQL	ug/Kg	J (all detects)
SED-031-SIV-SD-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	8.4 5.3 9.3	9.4 9.4 18	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	AROCLOR 1248 AROCLOR 1254 Aroclor 5460	J J J	4.5 4.8 8.9	9.3 9.3 18	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-078-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.7 1.1	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-086-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.7 1.7	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	6.6 6.6	9.1 18	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-030-SIV-SD-0.0-0.5	2,4-D	J	3.0	4.3	PQL	ug/Kg	J (all detects)
	DICAMBA	J	0.78	1.4	PQL	ug/Kg	
SED-031-SIV-SD-0.0-0.5	DICAMBA	J	0.69	1.3	PQL	ug/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	2,4-D	J	1.4	3.8	PQL	ug/Kg	J (all detects)
SL-074-SA5B-SS-0.0-0.5	2,4-D	J	1.9	3.9	PQL	ug/Kg	J (all detects)
	MCPA	J	230	270	PQL	ug/Kg	
SL-076-SA5B-SS-0.0-0.5	MCPP	J	130	270	PQL	ug/Kg	J (all detects)
SL-084-SA5B-SS-0.0-0.5	MCPA	J	250	270	PQL	ug/Kg	J (all detects)
SL-089-SA5B-SS-0.0-0.5	2,4,5-T	J	0.088	0.18	PQL	ug/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	DICAMBA	J	0.45	1.3	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	BENZO(A)ANTHRACENE	J	30	180	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	33	180	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	60	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	33	180	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	24	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	29	350	PQL	ug/Kg	
	CHRYSENE	J	46	180	PQL	ug/Kg	
	FLUORANTHENE	J	64	180	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	27	180	PQL	ug/Kg	
	PHENANTHRENE	J	23	180	PQL	ug/Kg	
	PYRENE	J	70	180	PQL	ug/Kg	
SED-029-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	110	370	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	31	180	PQL	ug/Kg	
SED-030-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	56	400	PQL	ug/Kg	J (all detects)
SED-031-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	38	370	PQL	ug/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	39	350	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	20	180	PQL	ug/Kg	
	PYRENE	J	25	180	PQL	ug/Kg	
SL-074-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	41	360	PQL	ug/Kg	J (all detects)
SL-076-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	350	PQL	ug/Kg	J (all detects)
	PYRENE	J	18	180	PQL	ug/Kg	
SL-084-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	25	360	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	22	180	PQL	ug/Kg	
	PYRENE	J	23	180	PQL	ug/Kg	
SL-089-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	330	360	PQL	ug/Kg	J (all detects)
SL-236-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	350	PQL	ug/Kg	J (all detects)
SL-301-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	22	180	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	29	180	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	18	180	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	26	370	PQL	ug/Kg	
	PYRENE	J	21	180	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP04-SA5B-QC-121310	1-METHYLNAPHTHALENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.87	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.75	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	6.7	19	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
SED-029-SIV-SD-0.0-0.5	ANTHRACENE	J	4.4	18	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	9.6	18	PQL	ug/Kg	
	BENZO(A)PYRENE	J	9.6	18	PQL	ug/Kg	
	Di-n-octylphthalate	J	97	200	PQL	ug/Kg	
SED-030-SIV-SD-0.0-0.5	CHRYSENE	J	1.6	2.0	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	7.3	22	PQL	ug/Kg	
	FLUORANTHENE	J	1.4	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.83	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	0.89	2.0	PQL	ug/Kg	
	PYRENE	J	1.2	2.0	PQL	ug/Kg	
SED-031-SIV-SD-0.0-0.5	ANTHRACENE	J	0.43	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.99	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.1	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.85	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.2	20	PQL	ug/Kg	
	Di-n-butylphthalate	J	13	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.9	PQL	ug/Kg	
SED-040-SIV-SD-0.0-0.5	ANTHRACENE	J	0.38	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	0.84	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.79	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.73	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	
SL-071-SA5B-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.74	1.8	PQL	ug/Kg	J (all detects)
SL-072-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.62	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.96	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.96	1.8	PQL	ug/Kg	
SL-073-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	13	18	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	16	18	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	12	18	PQL	ug/Kg	
	PYRENE	J	17	18	PQL	ug/Kg	
SL-074-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHENE	J	1.5	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.58	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.0	20	PQL	ug/Kg	
	FLUORENE	J	0.80	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.7	1.8	PQL	ug/Kg	
SL-078-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	9.7	18	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	11	18	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	16	18	PQL	ug/Kg	
	CHRYSENE	J	17	18	PQL	ug/Kg	
	FLUORANTHENE	J	16	18	PQL	ug/Kg	
	PYRENE	J	13	18	PQL	ug/Kg	
SL-083-SA5B-SS-0.0-0.5	ACENAPHTHENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	8.3	20	PQL	ug/Kg	
	NAPHTHALENE	J	0.78	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE036 **Laboratory: LL**

EDD Filename: DE036_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-084-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.6	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.78	1.8	PQL	ug/Kg	
SL-086-SA5B-SS-0.0-0.5	CHRYSENE	J	0.45	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.89	1.8	PQL	ug/Kg	
SL-089-SA5B-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	10	19	PQL	ug/Kg	
SL-092-SA5B-SS-0.0-0.5	NAPHTHALENE	J	0.78	1.9	PQL	ug/Kg	J (all detects)
SL-103-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	0.88	1.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.7	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.96	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	0.91	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.9	PQL	ug/Kg	
SL-139-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.89	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	9.6	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.9	PQL	ug/Kg	
SL-236-SA5B-SS-0.0-0.5	DIBENZO(A,H)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	6.4	19	PQL	ug/Kg	
	Di-n-octylphthalate	J	11	19	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-301-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.40	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.4	20	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	

LDC #: 25337H4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/5/11
SDG #: DE036 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	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	D (Sb, Cd, Ag, Zr 2SxRL)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Ba (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-078-SA5B-SS-0.0-0.5	11	DUP04-SA5B-QC-121310 D	21	SL-071-SA5B-SS-0.0-0.5MS	31	
2	SL-084-SA5B-SS-0.0-0.5	12	SED-029-SIV-SD-0.0-0.5	22	SL-071-SA5B-SS-0.0-0.5MSD	32	
3	SL-076-SA5B-SS-0.0-0.5	13	SED-031-SIV-SD-0.0-0.5	23	SL-071-SA5B-SS-0.0-0.5DUP	33	
4	SL-074-SA5B-SS-0.0-0.5	14	SED-030-SIV-SD-0.0-0.5	24		34	
5	SL-139-SA5B-SS-0.0-0.5	15	SED-040-SIV-SD-0.0-0.5	25		35	
6	SL-083-SA5B-SS-0.0-0.5	16	SL-086-SA5B-SS-0.0-0.5	26		36	
7	SL-074-SA5B-SS-0.0-0.5	17	SL-092-SA5B-SS-0.0-0.5	27		37	
8	SL-301-SA5B-SS-0.0-0.5	18	SL-103-SA5B-SS-0.0-0.5	28		38	
9	SL-073-SA5B-SS-0.0-0.5	19	SL-089-SA5B-SS-0.0-0.5	29		39	
10	SL-072-SA5B-SS-0.0-0.5	20	SL-236-SA5B-SS-0.0-0.5	30		40	

Notes: DUP04 & SL-071

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	6163878	N	3050B	6010B	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3050B	6020	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3060A	7199	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8081A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8082	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8151A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8270C	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	3550B	8270C SIM	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	Gen Prep	9045M	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	METHOD	300.0	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	METHOD	314.0	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5	6163878	N	METHOD	7471A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5MSD	P163878M240238A	MSD	3550B	8151A	III
13-Dec-2010	SL-075-SA5B-SS-0.0-0.5MS	P163878R240210A	MS	3550B	8151A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3060A	7199	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	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
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	Gen Prep	9045M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0	6163871	N	METHOD	9012B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3060A	7199	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	8330	8330A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	6163872	MS	METHOD	9012B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	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
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	8330	8330A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	6163873	MSD	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	3060A	7199	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	Gen Prep	9045M	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0DUP	6163874	DUP	METHOD	9012B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MSD	P163871M321933A	MSD	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-4.0-5.0MS	P163871R321904A	MS	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3050B	6010B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3050B	6020	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	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
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3546	1625C	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8015B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8082	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8270C	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	3550B	8270C SIM	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	5035	8015M	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	5035	8260B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	5035	8260B SIM	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	8330	8330A	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	Gen Prep	9045M	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	300.0	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	314.0	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	7471A	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	8015B	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	8315A	III
13-Dec-2010	SL-006-SA5C-SB-9.0-10.0	6163869	N	METHOD	9012B	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3050B	6010B	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3050B	6020	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3060A	7199	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8081A	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8082	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8151A	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8270C	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	3550B	8270C SIM	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	Gen Prep	9045M	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	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
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	314.0	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	6850	III
13-Dec-2010	SL-077-SA5B-SS-0.0-0.5	6163879	N	METHOD	7471A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3050B	6010B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3050B	6020	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3060A	7199	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3546	1625C	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8015B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8082	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8270C	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	3550B	8270C SIM	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	5035	8015M	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	5035	8260B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	5035	8260B SIM	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	8330	8330A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	Gen Prep	9045M	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	300.0	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	314.0	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	7471A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	8015B	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	8315A	III
13-Dec-2010	DUP13-SA5C-QC-121310	6163870	FD	METHOD	9012B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3050B	6010B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3050B	6020	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3060A	7199	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	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
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8015B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8082	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8270C	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	3550B	8270C SIM	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	5035	8015M	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	5035	8260B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	5035	8260B SIM	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	8330	8330A	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	Gen Prep	9045M	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	300.0	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	314.0	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	7471A	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	8015B	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	8315A	III
13-Dec-2010	SL-007-SA5C-SB-4.0-5.0	6163876	N	METHOD	9012B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3050B	6010B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3050B	6020	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3060A	7199	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3546	1625C	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8015B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8082	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8270C	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	3550B	8270C SIM	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	5035	8015M	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	5035	8260B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	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
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	8330	8330A	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	Gen Prep	9045M	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	300.0	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	314.0	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	7471A	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	8015B	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	8315A	III
13-Dec-2010	SL-007-SA5C-SB-9.0-10.0	6163877	N	METHOD	9012B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3005A	6010B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3020A	6020	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8081A	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8082	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8270C	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	3510C	8270C SIM	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	5030B	8260B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	5030B	8260B SIM	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	300.0	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	314.0	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	7199	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	Gen Prep	9040B	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	METHOD	7470A	III
13-Dec-2010	EB15-SA5B-121310	6163875	EB	METHOD	8151A	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3050B	6010B	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3050B	6020	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3060A	7199	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	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
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8082	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8151A	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8270C	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	3550B	8270C SIM	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	Gen Prep	9045M	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	METHOD	300.0	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	METHOD	314.0	III
13-Dec-2010	SL-087-SA5B-SS-0.0-0.5	6163881	N	METHOD	7471A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3050B	6010B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3050B	6020	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3060A	7199	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3546	1625C	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8015B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8081A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8082	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8151A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8270C	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	3550B	8270C SIM	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	5035	8015M	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	5035	8260B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	5035	8260B SIM	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	8330	8330A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	Gen Prep	9045M	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	300.0	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	314.0	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	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
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	8015B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	8315A	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5	6163880	N	METHOD	9012B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5MSD	P163880M322326A	MSD	METHOD	8015B	III
13-Dec-2010	SL-085-SA5B-SS-0.0-0.5MS	P163880R322312A	MS	METHOD	8015B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3050B	6010B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3050B	6020	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3060A	7199	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3546	1625C	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8015B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8082	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8270C	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	3550B	8270C SIM	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	5035	8015M	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	5035	8260B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	5035	8260B SIM	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	8330	8330A	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	Gen Prep	9045M	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	300.0	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	314.0	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	6850	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	7471A	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	8015B	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	8315A	III
13-Dec-2010	SL-003-SA5C-SB-4.0-5.0	6163884	N	METHOD	9012B	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	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
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3050B	6020	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3060A	7199	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8081A	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8082	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8151A	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8270C	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	3550B	8270C SIM	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	Gen Prep	9045M	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	METHOD	300.0	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	METHOD	314.0	III
13-Dec-2010	SL-095-SA5B-SS-0.0-0.5	6163882	N	METHOD	7471A	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3050B	6010B	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3050B	6020	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3060A	7199	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8081A	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8082	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8151A	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8270C	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	3550B	8270C SIM	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	Gen Prep	9045M	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	300.0	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	314.0	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	6850	III
13-Dec-2010	SED-032-SIV-SD-0.0-0.5	6163887	N	METHOD	7471A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3050B	6010B	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	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
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3060A	7199	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8081A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8082	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8151A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8270C	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	3550B	8270C SIM	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	Gen Prep	9045M	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	METHOD	300.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	METHOD	314.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5	6163883	N	METHOD	7471A	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5DUP	P163883D270644B	DUP	METHOD	314.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5DUP	P163883D271735B	DUP	METHOD	300.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5MS	P163883R270708B	MS	METHOD	314.0	III
13-Dec-2010	SL-091-SA5B-SS-0.0-0.5MS	P163883R271749B	MS	METHOD	300.0	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3050B	6010B	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3050B	6020	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3060A	7199	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8081A	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8082	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8151A	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8270C	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	3550B	8270C SIM	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	Gen Prep	9045M	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	METHOD	300.0	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	METHOD	314.0	III
13-Dec-2010	SED-033-SIV-SD-0.0-0.5	6163888	N	METHOD	7471A	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
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3050B	6010B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3050B	6020	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3060A	7199	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3546	1625C	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8015B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8082	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8270C	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	3550B	8270C SIM	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	5035	8015M	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	5035	8260B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	5035	8260B SIM	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	8330	8330A	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	Gen Prep	9045M	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	300.0	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	314.0	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	7471A	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	8015B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	8315A	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0	6163885	N	METHOD	9012B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0DUP	P163885D272017A	DUP	METHOD	9012B	III
13-Dec-2010	SL-001-SA5C-SB-4.0-5.0MS	P163885R272021A	MS	METHOD	9012B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3050B	6010B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3050B	6020	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3060A	7199	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3546	1625C	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8015B	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
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8082	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8270C	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	3550B	8270C SIM	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	5035	8015M	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	5035	8260B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	5035	8260B SIM	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	8330	8330A	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	Gen Prep	9045M	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	300.0	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	314.0	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	7471A	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	8015B	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	8315A	III
13-Dec-2010	SL-001-SA5C-SB-9.0-10.0	6163886	N	METHOD	9012B	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: EM **Method:** 9040B **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
PH	5.2		0.010	MDL	0.010	PQL	pH unit	J	H

Method Category: GENCHEM **Method:** 300.0 **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
Nitrate-NO3	16.8		0.92	MDL	1.7	PQL	mg/Kg	J	Q

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
FLUORIDE	0.90	J	0.85	MDL	1.1	PQL	mg/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
Nitrate-NO3	1.2	J	0.86	MDL	1.6	PQL	mg/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
Nitrate-NO3	13.0		0.90	MDL	1.7	PQL	mg/Kg	J	Q

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
Nitrate-NO3	1.9		0.87	MDL	1.6	PQL	mg/Kg	J	Q

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
Nitrate-NO3	8.0		0.87	MDL	1.6	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

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
Nitrate-NO3	1.2	J	0.88	MDL	1.7	PQL	mg/Kg	J	Z, Q

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
Nitrate-NO3	0.98	J	0.86	MDL	1.6	PQL	mg/Kg	J	Z, Q

Method Category: METALS

Method: 6010B **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
BORON	5.54	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
PHOSPHORUS	397		0.630	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	3800		20.2	MDL	56.2	PQL	mg/Kg	J	Q
TIN	2.94	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.82	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z

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
BORON	4.97	J	0.998	MDL	5.61	PQL	mg/Kg	J	Z
PHOSPHORUS	386		0.628	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2790		20.2	MDL	56.1	PQL	mg/Kg	J	Q
SODIUM	78.8	J	41.8	MDL	112	PQL	mg/Kg	J	Z
TIN	2.66	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.22	J	0.942	MDL	5.61	PQL	mg/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
BORON	3.23	J	0.908	MDL	5.10	PQL	mg/Kg	J	Z
PHOSPHORUS	267		0.572	MDL	10.2	PQL	mg/Kg	J	Q
POTASSIUM	1810		18.4	MDL	51.0	PQL	mg/Kg	J	Q
SODIUM	64.8	J	38.1	MDL	102	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **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
TIN	1.86	J	1.02	MDL	10.2	PQL	mg/Kg	U	B

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
BORON	2.87	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
PHOSPHORUS	306		0.594	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2360		19.1	MDL	53.1	PQL	mg/Kg	J	Q
SODIUM	105	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.33	J	1.06	MDL	10.6	PQL	mg/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
PHOSPHORUS	413		0.668	MDL	11.9	PQL	mg/Kg	J	Q
POTASSIUM	4570		21.5	MDL	59.6	PQL	mg/Kg	J	Q
TIN	2.80	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	4.76	J	1.00	MDL	5.96	PQL	mg/Kg	J	Z

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
BORON	4.64	J	0.959	MDL	5.39	PQL	mg/Kg	J	Z
PHOSPHORUS	349		0.603	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2660		19.4	MDL	53.9	PQL	mg/Kg	J	Q
TIN	2.50	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.44	J	0.905	MDL	5.39	PQL	mg/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
PHOSPHORUS	419		0.608	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3630		19.5	MDL	54.3	PQL	mg/Kg	J	Q
TIN	2.29	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.912	MDL	5.43	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
BORON	4.83	J	0.941	MDL	5.29	PQL	mg/Kg	J	Z
PHOSPHORUS	318		0.592	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2590		19.0	MDL	52.9	PQL	mg/Kg	J	Q
TIN	2.43	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.68	J	0.888	MDL	5.29	PQL	mg/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
BORON	4.96	J	0.949	MDL	5.33	PQL	mg/Kg	J	Z
PHOSPHORUS	430		0.597	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2790		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	1.20	J	0.896	MDL	5.33	PQL	mg/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
PHOSPHORUS	310		0.605	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	2560		19.4	MDL	54.0	PQL	mg/Kg	J	Q
TIN	2.43	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	2.75	J	0.907	MDL	5.40	PQL	mg/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
BORON	3.61	J	0.938	MDL	5.27	PQL	mg/Kg	J	Z
PHOSPHORUS	509		0.590	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	3410		19.0	MDL	52.7	PQL	mg/Kg	J	Q
TIN	2.61	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.25	J	0.886	MDL	5.27	PQL	mg/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
BORON	2.83	J	0.939	MDL	5.28	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

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
PHOSPHORUS	517		0.591	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2400		19.0	MDL	52.8	PQL	mg/Kg	J	Q
SODIUM	90.4	J	39.4	MDL	106	PQL	mg/Kg	J	Z
TIN	2.62	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.35	J	0.886	MDL	5.28	PQL	mg/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
PHOSPHORUS	422		0.588	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	3390		18.9	MDL	52.5	PQL	mg/Kg	J	Q
TIN	2.65	J	1.05	MDL	10.5	PQL	mg/Kg	U	B

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
BORON	5.31	J	0.954	MDL	5.36	PQL	mg/Kg	J	Z
PHOSPHORUS	451		0.600	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	3220		19.3	MDL	53.6	PQL	mg/Kg	J	Q
TIN	2.61	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	3.44	J	0.900	MDL	5.36	PQL	mg/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
PHOSPHORUS	518		0.586	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	4880		18.8	MDL	52.3	PQL	mg/Kg	J	Q
TIN	2.86	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	3.18	J	0.879	MDL	5.23	PQL	mg/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
BORON	4.36	J	0.928	MDL	5.21	PQL	mg/Kg	J	Z
PHOSPHORUS	441		0.584	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	3440		18.8	MDL	52.1	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

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

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
Zirconium	1.88	J	0.875	MDL	5.21	PQL	mg/Kg	J	Z

Method Category: METALS **Method:** 6020 **Matrix:** AQ

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 12:15:00 *Analysis Type:* REA6 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000099	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

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

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.102	J	0.0409	MDL	0.114	PQL	mg/Kg	J	Z, Q

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.340	J	0.0454	MDL	0.454	PQL	mg/Kg	J	Z

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.419		0.0568	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	123		0.123	MDL	0.454	PQL	mg/Kg	J	A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 **Collected:** 12/13/2010 10:10:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.214	J	0.0681	MDL	0.227	PQL	mg/Kg	J	Z, Q
ARSENIC	7.66		0.0681	MDL	0.454	PQL	mg/Kg	J	Q
LEAD	9.46		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, A
SILVER	0.0310	J	0.0136	MDL	0.114	PQL	mg/Kg	J	Z, Q
ZINC	91.3		0.636	MDL	3.41	PQL	mg/Kg	J	A

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 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	0.249		0.0404	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA2 **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	25.0		0.0292	MDL	0.561	PQL	mg/Kg	J	Q, A

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 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
SELENIUM	0.168	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.707		0.0561	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 2:57:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	112		0.121	MDL	0.449	PQL	mg/Kg	J	A

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 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	0.192	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	8.28		0.0673	MDL	0.449	PQL	mg/Kg	J	Q
SILVER	1.39		0.0135	MDL	0.112	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SED-032-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 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
ZINC	109		0.628	MDL	3.37	PQL	mg/Kg	J	A

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***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		0.0375	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA3** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.209	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA4** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.691		0.0520	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **REA5** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	133		0.112	MDL	0.416	PQL	mg/Kg	J	A

Sample ID: **SED-033-SIV-SD-0.0-0.5** ***Collected:*** **12/13/2010 3:40:00** ***Analysis Type:*** **RES** ***Dilution:*** **2**

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.286		0.0624	MDL	0.208	PQL	mg/Kg	J	Q
ARSENIC	9.50		0.0624	MDL	0.416	PQL	mg/Kg	J	Q
LEAD	15.0		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, A
SILVER	0.329		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
ZINC	118		0.583	MDL	3.12	PQL	mg/Kg	J	A

Sample ID: **SL-001-SA5C-SB-4.0-5.0** ***Collected:*** **12/13/2010 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
CADMIUM	0.0626	J	0.0382	MDL	0.106	PQL	mg/Kg	J	Z, Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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
SELENIUM	0.153	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 4:08:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.760		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 4:08:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	89.2		0.115	MDL	0.424	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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	0.0994	J	0.0637	MDL	0.212	PQL	mg/Kg	J	Z, Q
ARSENIC	7.96		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
LEAD	5.49		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A
SILVER	0.0190	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
ZINC	79.0		0.594	MDL	3.18	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.212		0.0434	MDL	0.120	PQL	mg/Kg	J	Q

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 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
SELENIUM	0.190	J	0.0482	MDL	0.482	PQL	mg/Kg	J	Z

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 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
MOLYBDENUM	1.12		0.0602	MDL	0.120	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 4:16:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	203		0.130	MDL	0.482	PQL	mg/Kg	J	A

Sample ID: SL-001-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 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	0.559		0.0723	MDL	0.241	PQL	mg/Kg	J	Q
ARSENIC	12.2		0.0723	MDL	0.482	PQL	mg/Kg	J	Q
LEAD	13.0		0.0125	MDL	0.241	PQL	mg/Kg	J	Q, A
SILVER	0.0765	J	0.0145	MDL	0.120	PQL	mg/Kg	J	Z, Q
ZINC	115		0.675	MDL	3.61	PQL	mg/Kg	J	A

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0875	J	0.0373	MDL	0.104	PQL	mg/Kg	J	Z, Q

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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
MOLYBDENUM	0.780		0.0518	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 2:37:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	119		0.112	MDL	0.414	PQL	mg/Kg	J	A

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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	0.174	J	0.0622	MDL	0.207	PQL	mg/Kg	J	Z, Q
ARSENIC	7.50		0.0622	MDL	0.414	PQL	mg/Kg	J	Q
LEAD	6.10		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-003-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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
SILVER	0.0366	J	0.0124	MDL	0.104	PQL	mg/Kg	J	Z, Q
ZINC	89.1		0.580	MDL	3.11	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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
CADMIUM	0.108	J	0.0402	MDL	0.112	PQL	mg/Kg	J	Z, Q

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.299	J	0.0447	MDL	0.447	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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
MOLYBDENUM	0.517		0.0559	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 9:45:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.121	MDL	0.447	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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	0.272		0.0670	MDL	0.223	PQL	mg/Kg	J	Q
ARSENIC	6.87		0.0670	MDL	0.447	PQL	mg/Kg	J	Q
LEAD	9.45		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, A
SILVER	0.0341	J	0.0134	MDL	0.112	PQL	mg/Kg	J	Z, Q
ZINC	81.2		0.626	MDL	3.35	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 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
CADMIUM	0.248		0.0388	MDL	0.108	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.241	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 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
MOLYBDENUM	0.790		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 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
BARIUM	106		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 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	0.296		0.0647	MDL	0.216	PQL	mg/Kg	J	Q
ARSENIC	11.4		0.0647	MDL	0.431	PQL	mg/Kg	J	Q
LEAD	13.0		0.0112	MDL	0.216	PQL	mg/Kg	J	Q, A
SILVER	0.0704	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
ZINC	114		0.604	MDL	3.24	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.0887	J	0.0388	MDL	0.108	PQL	mg/Kg	J	Z, Q

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.141	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.684		0.0539	MDL	0.108	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	138		0.116	MDL	0.431	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.156	J	0.0646	MDL	0.215	PQL	mg/Kg	J	Z, Q
ARSENIC	6.80		0.0646	MDL	0.431	PQL	mg/Kg	J	Q
LEAD	6.51		0.0112	MDL	0.215	PQL	mg/Kg	J	Q, A
SILVER	0.0301	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
ZINC	94.7		0.603	MDL	3.23	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.128		0.0385	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.185	J	0.0428	MDL	0.428	PQL	mg/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.16		0.0535	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** REA5 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.115	MDL	0.428	PQL	mg/Kg	J	A

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.132	J	0.0642	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	9.29		0.0642	MDL	0.428	PQL	mg/Kg	J	Q
LEAD	7.95		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 12:14:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0588	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z, Q
ZINC	90.9		0.599	MDL	3.21	PQL	mg/Kg	J	A

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.173		0.0376	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.199	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.843		0.0522	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	151		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-075-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 9:03:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.193	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
ARSENIC	8.68		0.0626	MDL	0.418	PQL	mg/Kg	J	Q
LEAD	10.0		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, A
SILVER	0.173		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
ZINC	127		0.585	MDL	3.13	PQL	mg/Kg	J	A

Sample ID: SL-077-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
CADMIUM	0.130		0.0380	MDL	0.106	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 10:04:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0944	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
MOLYBDENUM	0.538		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
BARIUM	97.9		0.114	MDL	0.422	PQL	mg/Kg	J	A

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.215		0.0633	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	8.71		0.0633	MDL	0.422	PQL	mg/Kg	J	Q
LEAD	6.50		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
SILVER	0.0576	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
ZINC	84.3		0.591	MDL	3.17	PQL	mg/Kg	J	A

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.490		0.0371	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.237	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	10.7		0.0515	MDL	0.103	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	179		0.111	MDL	0.412	PQL	mg/Kg	J	A

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.470		0.0618	MDL	0.206	PQL	mg/Kg	J	Q
ARSENIC	8.71		0.0618	MDL	0.412	PQL	mg/Kg	J	Q
LEAD	13.3		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, A
SILVER	0.0715	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, Q
ZINC	147		0.577	MDL	3.09	PQL	mg/Kg	J	A

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.282		0.0382	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **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	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.19		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	143		0.115	MDL	0.424	PQL	mg/Kg	J	A

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.405		0.0637	MDL	0.212	PQL	mg/Kg	J	Q
ARSENIC	8.58		0.0637	MDL	0.424	PQL	mg/Kg	J	Q
LEAD	10.9		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, A

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.841		0.0127	MDL	0.106	PQL	mg/Kg	J	Q
ZINC	133		0.594	MDL	3.18	PQL	mg/Kg	J	A

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.271		0.0380	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.334	J	0.0423	MDL	0.423	PQL	mg/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
MOLYBDENUM	1.31		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **Analysis Type:** REA5 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	175		0.114	MDL	0.423	PQL	mg/Kg	J	A

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	0.437		0.0634	MDL	0.211	PQL	mg/Kg	J	Q
ARSENIC	10.8		0.0634	MDL	0.423	PQL	mg/Kg	J	Q
LEAD	15.2		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, A
SILVER	0.0585	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
ZINC	182		0.592	MDL	3.17	PQL	mg/Kg	J	A

Sample ID: SL-095-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
CADMIUM	0.278		0.0364	MDL	0.101	PQL	mg/Kg	J	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
SELENIUM	0.159	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
MOLYBDENUM	1.17		0.0506	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 2:40:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	162		0.109	MDL	0.405	PQL	mg/Kg	J	A

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	0.330		0.0607	MDL	0.202	PQL	mg/Kg	J	Q
ARSENIC	7.12		0.0607	MDL	0.405	PQL	mg/Kg	J	Q
LEAD	10.9		0.0105	MDL	0.202	PQL	mg/Kg	J	Q, A
SILVER	0.0526	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z, Q
ZINC	126		0.567	MDL	3.04	PQL	mg/Kg	J	A

Method Category: METALS

Method: 7199 **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
HEXAVALENT CHROMIUM	0.28	J	0.23	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.79	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **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
HEXAVALENT CHROMIUM	0.37	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.82	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.26	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

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
HEXAVALENT CHROMIUM	0.26	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.46	J	0.21	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.66	J	0.21	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.50	J	0.22	MDL	1.1	PQL	mg/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
HEXAVALENT CHROMIUM	0.47	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

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

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
HEXAVALENT CHROMIUM	0.52	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

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

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
MERCURY	0.0148	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

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
MERCURY	0.0073	J	0.0033	MDL	0.116	PQL	mg/Kg	J	Z

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
MERCURY	0.0131	J	0.0030	MDL	0.105	PQL	mg/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
MERCURY	0.0043	J	0.0031	MDL	0.108	PQL	mg/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
MERCURY	0.0036	J	0.0029	MDL	0.102	PQL	mg/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
MERCURY	0.0304	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **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
MERCURY	0.0218	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 1625C **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	129		19.1	MDL	38.2	PQL	ng/Kg	J	FD

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 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
N-NITROSODIMETHYLAMINE	18.8	U	18.8	MDL	37.6	PQL	ng/Kg	UJ	Q, FD

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	108	J	89.3	MDL	179	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
BETA-BHC	0.35		0.069	MDL	0.19	PQL	ug/Kg	J	S
DELTA-BHC	0.19		0.041	MDL	0.19	PQL	ug/Kg	J	S

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.16	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DELTA-BHC	0.12	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.44	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SED-033-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 3:40:00 *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	1.7	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z
AROCLOR 1260	2.1	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 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
AROCLOR 1254	1.3	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.61	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 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	0.97	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S, FD

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *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 1260	0.71	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.9	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-007-SA5C-SB-9.0-10.0 **Collected:** 12/13/2010 12:14:00 **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 1248	1.4	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1254	1.1	J	0.36	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	0.88	J	0.36	MDL	1.9	PQL	ug/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
Aroclor 5460	2.9	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Aroclor 5460	1.3	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z

Sample ID: SL-085-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:35:00 **Analysis Type:** RES **Dilution:** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	9.7	J	5.4	MDL	18	PQL	ug/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 1:17:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	5.1	J	2.2	MDL	7.2	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 3:10:00 **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 1254	38		0.72	MDL	3.7	PQL	ug/Kg	J	S
Aroclor 5460	2.8	J	2.2	MDL	7.2	PQL	ug/Kg	J	Z, S

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
DINOSEB	0.92	U	0.92	MDL	2.7	PQL	ug/Kg	R	L

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
2,4-DB	5.1		0.66	MDL	1.8	PQL	ug/Kg	U	B
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

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
DICAMBA	0.94	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z, Q
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	280		80	MDL	270	PQL	ug/Kg	U	B

Sample ID: SL-077-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

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
2,4-DB	1.6	J	0.66	MDL	1.8	PQL	ug/Kg	U	B
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L
MCPA	200	J	81	MDL	270	PQL	ug/Kg	J	Z
MCPP	130	J	80	MDL	270	PQL	ug/Kg	U	B

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
2,4-DB	2.9		0.68	MDL	1.9	PQL	ug/Kg	U	B
DICAMBA	0.54	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-091-SA5B-SS-0.0-0.5 **Collected:** 12/13/2010 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
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

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
2,4-DB	3.9		0.65	MDL	1.8	PQL	ug/Kg	U	B
DICAMBA	0.55	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB15-SA5B-121310 **Collected:** 12/13/2010 12:15:00 **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	15	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SED-032-SIV-SD-0.0-0.5 **Collected:** 12/13/2010 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
ACENAPHTHENE	43	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	37	J	19	MDL	190	PQL	ug/Kg	J	Z
CARBAZOLE	24	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	120	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	110	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 **Collected:** 12/13/2010 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-CHLOROPHENYL-PHENYLETHER	38	U	38	MDL	190	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3800	PQL	ug/Kg	UJ	Q

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: EB15-SA5B-121310 *Collected:* 12/13/2010 12:15:00 *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	0.24	J	0.050	MDL	1.0	PQL	ug/L	U	B
Butylbenzylphthalate	0.093	J	0.050	MDL	1.0	PQL	ug/L	U	B
Diethylphthalate	0.11	J	0.050	MDL	1.0	PQL	ug/L	U	B
Di-n-butylphthalate	0.31	J	0.050	MDL	1.0	PQL	ug/L	U	B
Di-n-octylphthalate	0.082	J	0.050	MDL	1.0	PQL	ug/L	U	B
NAPHTHALENE	0.033	J	0.010	MDL	0.050	PQL	ug/L	J	Z
PHENANTHRENE	0.018	J	0.010	MDL	0.050	PQL	ug/L	J	Z

Method Category: SVOA

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

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.9	MDL	21	PQL	ug/Kg	U	B
CHRYSENE	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	FD

Sample ID: SED-032-SIV-SD-0.0-0.5 *Collected:* 12/13/2010 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
ACENAPHTHYLENE	0.49	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	30		6.9	MDL	21	PQL	ug/Kg	U	B

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-METHYLNAPHTHALENE	0.94	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.96	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.99	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	17	J	6.4	MDL	19	PQL	ug/Kg	U	B
NAPHTHALENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 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
BENZO(A)ANTHRACENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-003-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 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
BENZO(G,H,I)PERYLENE	0.90	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.76	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-006-SA5C-SB-4.0-5.0 ***Collected:*** 12/13/2010 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	9.0	J	6.8	MDL	20	PQL	ug/Kg	U	B
CHRYSENE	0.46	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, FD

Sample ID: SL-007-SA5C-SB-9.0-10.0 ***Collected:*** 12/13/2010 12:14:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	1.3	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	12	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.98	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-075-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 9:03:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	0.49	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.4	MDL	19	PQL	ug/Kg	U	B
DIBENZO(A,H)ANTHRACENE	0.78	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.2	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-077-SA5B-SS-0.0-0.5 ***Collected:*** 12/13/2010 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
BENZO(A)ANTHRACENE	1.7	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	J	6.5	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.2	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

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *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)ANTHRACENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	14	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Di-n-butylphthalate	9.0	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.99	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-087-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:17:00 *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	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	14	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.91	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-091-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.6	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.5	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	25		6.5	MDL	20	PQL	ug/Kg	U	B
NAPHTHALENE	0.74	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-095-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 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	16	J	6.3	MDL	19	PQL	ug/Kg	U	B
INDENO(1,2,3-CD)PYRENE	1.4	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8315A **Matrix:** SO

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
FORMALDEHYDE	990	J	650	MDL	1600	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 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
METHANOL	110	J	110	MDL	540	PQL	ug/Kg	J	Z

Sample ID: SL-007-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	140	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **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
ACETONE	7	J	6	MDL	20	PQL	ug/L	J	Z

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: DUP13-SA5C-QC-121310 *Collected:* 12/13/2010 10:10:00 *Analysis Type:* RES *Dilution:* 1.1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.97	J	0.30	MDL	5.1	PQL	ug/Kg	U	B

Sample ID: SL-001-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 4:08:00 *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	3.0	J	0.25	MDL	4.1	PQL	ug/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-001-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 4:16:00 *Analysis Type:* RES *Dilution:* 0.85

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	5.6	J	1.2	MDL	8.2	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.5	J	0.24	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-003-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 2:37:00 *Analysis Type:* RES *Dilution:* 0.93

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.13	J	0.12	MDL	4.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.4	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

Sample ID: SL-006-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 9:45:00 *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	0.63	J	0.26	MDL	4.3	PQL	ug/Kg	U	B

Sample ID: SL-006-SA5C-SB-9.0-10.0 *Collected:* 12/13/2010 9:55:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACETONE	8.7	J	7.3	MDL	8.8	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	1.1	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-007-SA5C-SB-4.0-5.0 *Collected:* 12/13/2010 12:14:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHLOROFORM	0.14	J	0.12	MDL	4.0	PQL	ug/Kg	U	B
METHYLENE CHLORIDE	2.5	J	0.24	MDL	4.0	PQL	ug/Kg	U	B

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
METHYLENE CHLORIDE	1.4	J	0.26	MDL	4.4	PQL	ug/Kg	U	B

Sample ID: SL-085-SA5B-SS-0.0-0.5 *Collected:* 12/13/2010 1:35:00 *Analysis Type:* RES *Dilution:* 1.29

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	1.5	J	0.33	MDL	5.5	PQL	ug/Kg	U	B

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Data Qualifier Summary

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_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: DE037 **Laboratory: LL**

EDD Filename: DE037_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: DE037 **Laboratory: LL**

EDD Filename: DE037_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

DE037

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE037 **Laboratory: LL**
EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

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

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB15-SA5B-121310 (RES)	Sampling To Analysis	103.00	48.00	HOURS	J (all detects) R (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35548CB221648	12/23/2010 4:48:00 PM	MAGNESIUM	0.0421 mg/L	EB15-SA5B-121310
P35548CB222358	12/22/2010 11:58:00 PM	CALCIUM	0.0960 mg/L	EB15-SA5B-121310

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35108CB221941	12/20/2010 7:41:00 PM	PHOSPHORUS TIN	1.63 mg/Kg 1.28 mg/Kg	DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-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
DUP13-SA5C-QC-121310(RES)	TIN	2.94 mg/Kg	2.94U mg/Kg
SED-032-SIV-SD-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SED-033-SIV-SD-0.0-0.5(RES)	TIN	1.86 mg/Kg	1.86U mg/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	TIN	2.33 mg/Kg	2.33U mg/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	TIN	2.80 mg/Kg	2.80U mg/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	TIN	2.29 mg/Kg	2.29U mg/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	TIN	2.45 mg/Kg	2.45U mg/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-077-SA5B-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	TIN	2.65 mg/Kg	2.65U mg/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg
SL-091-SA5B-SS-0.0-0.5(RES)	TIN	2.86 mg/Kg	2.86U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8015B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P50505AB321750A	12/17/2010 5:50:00 PM	METHANOL	110 ug/Kg	DUP13-SA5C-QC-121310 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P51516AB242352A	12/20/2010 11:52:00 PM	2,4-DB MCPP	1.2 ug/Kg 160 ug/Kg	SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-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-033-SIV-SD-0.0-0.5(RES)	2,4-DB	5.1 ug/Kg	5.1U ug/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	MCPP	280 ug/Kg	280U ug/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	2,4-DB	1.6 ug/Kg	1.8U ug/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	MCPP	130 ug/Kg	270U ug/Kg
SL-087-SA5B-SS-0.0-0.5(RES)	2,4-DB	2.9 ug/Kg	2.9U ug/Kg
SL-095-SA5B-SS-0.0-0.5(RES)	2,4-DB	3.9 ug/Kg	3.9U ug/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB16B212115A	12/14/2010 9:15:00 PM	CHLOROFORM METHYLENE CHLORIDE TOLUENE	0.22 ug/Kg 1.3 ug/Kg 0.09 ug/Kg	DUP13-SA5C-QC-121310 SL-001-SA5C-SB-4.0-5.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-085-SA5B-SS-0.0-0.5
VBLKB18B211848A	12/16/2010 6:48:00 PM	CHLOROFORM METHYLENE CHLORIDE	0.37 ug/Kg 1.0 ug/Kg	SL-001-SA5C-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
DUP13-SA5C-QC-121310(RES)	METHYLENE CHLORIDE	0.97 ug/Kg	5.1U ug/Kg
SL-001-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	3.0 ug/Kg	4.1U ug/Kg
SL-001-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	4.1U ug/Kg
SL-003-SA5C-SB-4.0-5.0(RES)	CHLOROFORM	0.13 ug/Kg	4.0U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_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-003-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.4 ug/Kg	4.0U ug/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.63 ug/Kg	4.3U ug/Kg
SL-006-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	4.4U ug/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	CHLOROFORM	0.14 ug/Kg	4.0U ug/Kg
SL-007-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	2.5 ug/Kg	4.0U ug/Kg
SL-007-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.4 ug/Kg	4.4U ug/Kg
SL-085-SA5B-SS-0.0-0.5(RES)	METHYLENE CHLORIDE	1.5 ug/Kg	5.5U ug/Kg

Method: 8270C
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLB35B262253	1/3/2011 10:53:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Diethylphthalate	18 ug/Kg 28 ug/Kg	DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI34B262040	12/22/2010 8:40:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE Butylbenzylphthalate Diethylphthalate Di-n-butylphthalate Di-n-octylphthalate	0.11 ug/L 0.076 ug/L 0.063 ug/L 0.13 ug/L 0.084 ug/L	EB15-SA5B-121310

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)	BIS(2-ETHYLHEXYL)PHTHALATE	0.24 ug/L	1.0U ug/L
EB15-SA5B-121310(RES)	Butylbenzylphthalate	0.093 ug/L	1.0U ug/L
EB15-SA5B-121310(RES)	Diethylphthalate	0.11 ug/L	1.0U ug/L

Method Blank Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_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
EB15-SA5B-121310(RES)	Di-n-butylphthalate	0.31 ug/L	1.0U ug/L
EB15-SA5B-121310(RES)	Di-n-octylphthalate	0.082 ug/L	1.0U ug/L

Method: 8270C SIM
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKLC35B261309	12/29/2010 1:09:00 PM	BIS(2-ETHYLHEXYL)PHTHALATE	6.3 ug/Kg	DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-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
DUP13-SA5C-QC-121310(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	10 ug/Kg	21U ug/Kg
SED-032-SIV-SD-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	30 ug/Kg	30U ug/Kg
SED-033-SIV-SD-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	17 ug/Kg	19U ug/Kg
SL-006-SA5C-SB-4.0-5.0(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	9.0 ug/Kg	20U ug/Kg
SL-075-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	10 ug/Kg	19U ug/Kg
SL-077-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	9.0 ug/Kg	19U ug/Kg
SL-091-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	25 ug/Kg	25U ug/Kg
SL-095-SA5B-SS-0.0-0.5(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	16 ug/Kg	19U ug/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_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-006-SA5C-SB-4.0-5.0MS (DUP13-SA5C-QC-121310 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	Nitrate-NO3	152	-	80.00-120.00	-	Nitrate-NO3	J (all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-075-SA5B-SS-0.0-0.5MS SL-075-SA5B-SS-0.0-0.5MSD (SL-075-SA5B-SS-0.0-0.5)	2,4-D 2,4-DB DALAPON MCPA	- 188 - 232	- - 100 199	28.00-161.00 20.00-170.00 12.00-86.00 31.00-184.00	56 (35.00) - 72 (50.00) -	2,4-D 2,4-DB DALAPON MCPA	J(all detects)
SL-075-SA5B-SS-0.0-0.5MS SL-075-SA5B-SS-0.0-0.5MSD (SL-075-SA5B-SS-0.0-0.5)	DICAMBA	5	5	33.00-120.00	-	DICAMBA	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-006-SA5C-SB-4.0-5.0MS SL-006-SA5C-SB-4.0-5.0MSD (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	ARSENIC CADMIUM SILVER ZINC	140 129 - -	155 138 130 152	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ARSENIC CADMIUM SILVER ZINC	J(all detects) Zn 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: DE037 **Laboratory: LL**

EDD Filename: DE037_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-006-SA5C-SB-4.0-5.0MS **SL-006-SA5C-SB-4.0-5.0MSD** (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	ANTIMONY LEAD	51 -	58 67	75.00-125.00 75.00-125.00	- -	ANTIMONY LEAD	J(all detects) UJ(all non-detects)
SL-006-SA5C-SB-4.0-5.0MSD (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	MOLYBDENUM	-	133	75.00-125.00	-	MOLYBDENUM	J(all detects)
SL-006-SA5C-SB-4.0-5.0MS (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0. SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	BARIUM	63	-	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_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-006-SA5C-SB-4.0-5.0MS **SL-006-SA5C-SB-4.0-5.0MSD** (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	ALUMINUM IRON MANGANESE POTASSIUM TITANIUM	1450 483 167 134 528	1167 835 180 - 467	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - - -	ALUMINUM IRON MANGANESE POTASSIUM TITANIUM	J(all detects) Al, Fe, Mn, Ti No Qual, >4x
SL-006-SA5C-SB-4.0-5.0MS **SL-006-SA5C-SB-4.0-5.0MSD** (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	CALCIUM MAGNESIUM	-144 -242	-221 -219	75.00-125.00 75.00-125.00	- -	CALCIUM MAGNESIUM	No Qual, >4x
SL-006-SA5C-SB-4.0-5.0MS (DUP13-SA5C-QC-121310 SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-001-SA5C-SB-4.0-5.0 SL-001-SA5C-SB-9.0-10.0 SL-003-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-4.0-5.0 SL-006-SA5C-SB-9.0-10.0 SL-007-SA5C-SB-4.0-5.0 SL-007-SA5C-SB-9.0-10.0 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	PHOSPHORUS	54	-	75.00-125.00	-	PHOSPHORUS	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-006-SA5C-SB-4.0-5.0MSD (SL-006-SA5C-SB-4.0-5.0)	2,4-DINITROPHENOL	-	-	20.00-143.00	35 (30.00)	2,4-DINITROPHENOL	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: DE037 **Laboratory: LL**

EDD Filename: DE037_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-006-SA5C-SB-4.0-5.0MSD	4-CHLOROPHENYL-PHENYLET	-	79	80.00-109.00	-	4-CHLOROPHENYL-PHENYLE	J(all detects)
(SL-006-SA5C-SB-4.0-5.0)	BENZIDINE	-	23	35.00-141.00	46 (30.00)	BENZIDINE	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-006-SA5C-SB-4.0-5.0MSD	N-NITROSODIMETHYLAMINE	-	66	70.00-130.00	-	N-NITROSODIMETHYLAMINE	J(all detects)
(SL-006-SA5C-SB-4.0-5.0)							UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-006-SA5C-SB-4.0-5.0DUP	ANTIMONY	49	20.00	
(DUP13-SA5C-QC-121310	MOLYBDENUM	22	20.00	
SED -032-SIV-SD-0.0-0.5	SILVER	26	20.00	
SED -033-SIV-SD-0.0-0.5				
SL -001-SA5C-SB-4.0-5.0				
SL -001-SA5C-SB-9.0-10.0				
SL -003-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-9.0-10.0				No Qual
SL -007-SA5C-SB-4.0-5.0				OK by difference
SL -007-SA5C-SB-9.0-10.0				
SL -075-SA5B-SS-0.0-0.5				
SL -077-SA5B-SS-0.0-0.5				
SL -085-SA5B-SS-0.0-0.5				
SL -087-SA5B-SS-0.0-0.5				
SL -091-SA5B-SS-0.0-0.5				
SL -095-SA5B-SS-0.0-0.5)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-006-SA5C-SB-4.0-5.0DUP	HEXAVALENT CHROMIUM	32	20.00	
(DUP13-SA5C-QC-121310				
SED -032-SIV-SD-0.0-0.5				
SED -033-SIV-SD-0.0-0.5				
SL -001-SA5C-SB-4.0-5.0				
SL -001-SA5C-SB-9.0-10.0				
SL -003-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-4.0-5.0				
SL -006-SA5C-SB-9.0-10.0				No Qual
SL -007-SA5C-SB-4.0-5.0				OK by difference
SL -007-SA5C-SB-9.0-10.0				
SL -075-SA5B-SS-0.0-0.5				
SL -077-SA5B-SS-0.0-0.5				
SL -085-SA5B-SS-0.0-0.5				
SL -087-SA5B-SS-0.0-0.5				
SL -091-SA5B-SS-0.0-0.5				
SL -095-SA5B-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03506AY241102A (EB15-SA5B-121310)	4,4'-DDE	-	137	66.00-130.00	-	4,4'-DDE	J (all detects)

Method: 7199
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P34813AY271243A (EB15-SA5B-121310)	HEXAVALENT CHROMIUM	-	112	90.00-110.00	-	HEXAVALENT CHROMIUM	J(all detects)

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P0WBLCSY262212 (EB15-SA5B-121310)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)
	2,4,5-TRICHLOROPHENOL	-	108	79.00-107.00	-	2,4,5-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	-	117	80.00-109.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	-	117	72.00-110.00	-	2,4-DIMETHYLPHENOL	
	2-CHLOROPHENOL	-	109	77.00-108.00	-	2-CHLOROPHENOL	
	2-METHYLPHENOL	-	102	64.00-101.00	-	2-METHYLPHENOL	
	DIBENZOFURAN	-	111	83.00-108.00	-	DIBENZOFURAN	
P0WBLCSY262212 (EB15-SA5B-121310)	BENZOIC ACID	-	-	10.00-69.00	44 (30.00)	BENZOIC ACID	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
P03516AQ240020A (SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_v1. eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03556AQ240109A (SED-032-SIV-SD-0.0-0.5 SED-033-SIV-SD-0.0-0.5 SL-075-SA5B-SS-0.0-0.5 SL-077-SA5B-SS-0.0-0.5 SL-085-SA5B-SS-0.0-0.5 SL-087-SA5B-SS-0.0-0.5 SL-091-SA5B-SS-0.0-0.5 SL-095-SA5B-SS-0.0-0.5)	METHOXYCHLOR	131	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	*Surrogate*	*Sample % Recovery*	*% Recovery Limits*	*Affected Compounds*	*Flag*
SED-032-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	135	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-006-SA5C-SB-4.0-5.0	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)
SL-091-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	190	45.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE037 Laboratory: LL

EDD Filename: DE037_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: 1625C
Matrix: SO

Analyte	Concentration (ng/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
N-NITROSODIMETHYLAMINE	37.6 U	129	200	50.00	J(all detects) UJ(all non-detects)

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
FLUORIDE	3.3	3.6	9	50.00	No Qualifiers Applied
Nitrate-NO3	13.0	16.8	26	50.00	

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
ALUMINUM	23700	26300	10	50.00	No Qualifiers Applied
BORON	7.11	5.54	25	50.00	
CALCIUM	7330	7160	2	50.00	
IRON	29600	33600	13	50.00	
LITHIUM	29.0	29.5	2	50.00	
MAGNESIUM	7030	7170	2	50.00	
MANGANESE	387	332	15	50.00	
PHOSPHORUS	419	397	5	50.00	
POTASSIUM	3630	3800	5	50.00	
SODIUM	198	189	5	50.00	
STRONTIUM	32.2	33.9	5	50.00	
TIN	2.29	2.94	25	50.00	
TITANIUM	1230	1560	24	50.00	
Zirconium	3.82	4.82	23	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
ANTIMONY	0.272	0.214	24	50.00	No Qualifiers Applied
ARSENIC	6.87	7.66	11	50.00	
BARIUM	128	123	4	50.00	
BERYLLIUM	0.957	0.962	1	50.00	
CADMIUM	0.108	0.102	6	50.00	
CHROMIUM	38.2	43.1	12	50.00	
COBALT	9.01	9.56	6	50.00	
COPPER	12.0	12.3	2	50.00	
LEAD	9.45	9.46	0	50.00	
MOLYBDENUM	0.517	0.419	21	50.00	
NICKEL	17.0	19.0	11	50.00	
SELENIUM	0.299	0.340	13	50.00	
SILVER	0.0341	0.0310	10	50.00	
THALLIUM	0.361	0.392	8	50.00	
VANADIUM	76.5	89.1	15	50.00	
ZINC	81.2	91.3	12	50.00	

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
HEXAVALENT CHROMIUM	0.26	0.28	7	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
AROCLOR 1254	0.97	0.44	75	50.00	J(all detects)

Method: 8260B
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
METHYLENE CHLORIDE	0.63	0.97	42	50.00	No Qualifiers Applied

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
BIS(2-ETHYLHEXYL)PHTHALATE	9.0	10	11	50.00	No Qualifiers Applied
CHRYSENE	0.46	1.9 U	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
PH	8.16	8.05	1	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SL-006-SA5C-SB-4.0-5.0	DUP13-SA5C-QC-121310			
Oxidation Reduction Potential	399	400	0		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory:** LL

EDD Filename: DE037_v1. **eQAPP Name:** CDM_SSFL_110509

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	LEAD	J	0.000099	0.0010	PQL	mg/L	J (all detects)

Method: 8260B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	ACETONE	J	7	20	PQL	ug/L	J (all detects)

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB15-SA5B-121310	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.24	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.093	1.0	PQL	ug/L	
	Diethylphthalate	J	0.11	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.31	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.082	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.033	0.050	PQL	ug/L	
	PHENANTHRENE	J	0.018	0.050	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5B-SS-0.0-0.5	N-NITROSODIMETHYLAMINE	J	108	179	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-033-SIV-SD-0.0-0.5	FLUORIDE	J	0.90	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.2	1.7	PQL	mg/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	Nitrate-NO3	J	0.98	1.6	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **6010B**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	BORON	J	5.54	5.62	PQL	mg/Kg	J (all detects)
	TIN	J	2.94	11.2	PQL	mg/Kg	
	Zirconium	J	4.82	5.62	PQL	mg/Kg	
SED-032-SIV-SD-0.0-0.5	BORON	J	4.97	5.61	PQL	mg/Kg	J (all detects)
	SODIUM	J	78.8	112	PQL	mg/Kg	
	TIN	J	2.66	11.2	PQL	mg/Kg	
	Zirconium	J	1.22	5.61	PQL	mg/Kg	
SED-033-SIV-SD-0.0-0.5	BORON	J	3.23	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	64.8	102	PQL	mg/Kg	
	TIN	J	1.86	10.2	PQL	mg/Kg	
SL-001-SA5C-SB-4.0-5.0	BORON	J	2.87	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	105	106	PQL	mg/Kg	
	TIN	J	2.33	10.6	PQL	mg/Kg	
SL-001-SA5C-SB-9.0-10.0	TIN	J	2.80	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.76	5.96	PQL	mg/Kg	
SL-003-SA5C-SB-4.0-5.0	BORON	J	4.64	5.39	PQL	mg/Kg	J (all detects)
	TIN	J	2.50	10.8	PQL	mg/Kg	
	Zirconium	J	1.44	5.39	PQL	mg/Kg	
SL-006-SA5C-SB-4.0-5.0	TIN	J	2.29	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.82	5.43	PQL	mg/Kg	
SL-006-SA5C-SB-9.0-10.0	BORON	J	4.83	5.29	PQL	mg/Kg	J (all detects)
	TIN	J	2.43	10.6	PQL	mg/Kg	
	Zirconium	J	1.68	5.29	PQL	mg/Kg	
SL-007-SA5C-SB-4.0-5.0	BORON	J	4.96	5.33	PQL	mg/Kg	J (all detects)
	TIN	J	2.45	10.7	PQL	mg/Kg	
	Zirconium	J	1.20	5.33	PQL	mg/Kg	
SL-007-SA5C-SB-9.0-10.0	TIN	J	2.43	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.75	5.40	PQL	mg/Kg	
SL-075-SA5B-SS-0.0-0.5	BORON	J	3.61	5.27	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	10.5	PQL	mg/Kg	
	Zirconium	J	2.25	5.27	PQL	mg/Kg	
SL-077-SA5B-SS-0.0-0.5	BORON	J	2.83	5.28	PQL	mg/Kg	J (all detects)
	SODIUM	J	90.4	106	PQL	mg/Kg	
	TIN	J	2.62	10.6	PQL	mg/Kg	
	Zirconium	J	1.35	5.28	PQL	mg/Kg	
SL-085-SA5B-SS-0.0-0.5	TIN	J	2.65	10.5	PQL	mg/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	BORON	J	5.31	5.36	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	10.7	PQL	mg/Kg	
	Zirconium	J	3.44	5.36	PQL	mg/Kg	
SL-091-SA5B-SS-0.0-0.5	TIN	J	2.86	10.5	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.18	5.23	PQL	mg/Kg	
SL-095-SA5B-SS-0.0-0.5	BORON	J	4.36	5.21	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.88	5.21	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	ANTIMONY	J	0.214	0.227	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.102	0.114	PQL	mg/Kg	
	SELENIUM	J	0.340	0.454	PQL	mg/Kg	
	SILVER	J	0.0310	0.114	PQL	mg/Kg	
SED-032-SIV-SD-0.0-0.5	ANTIMONY	J	0.192	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.168	0.449	PQL	mg/Kg	
SED-033-SIV-SD-0.0-0.5	SELENIUM	J	0.209	0.416	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	ANTIMONY	J	0.0994	0.212	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0626	0.106	PQL	mg/Kg	
	SELENIUM	J	0.153	0.424	PQL	mg/Kg	
	SILVER	J	0.0190	0.106	PQL	mg/Kg	
SL-001-SA5C-SB-9.0-10.0	SELENIUM	J	0.190	0.482	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0765	0.120	PQL	mg/Kg	
SL-003-SA5C-SB-4.0-5.0	ANTIMONY	J	0.174	0.207	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0875	0.104	PQL	mg/Kg	
	SELENIUM	J	0.177	0.414	PQL	mg/Kg	
	SILVER	J	0.0366	0.104	PQL	mg/Kg	
SL-006-SA5C-SB-4.0-5.0	CADMIUM	J	0.108	0.112	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.299	0.447	PQL	mg/Kg	
	SILVER	J	0.0341	0.112	PQL	mg/Kg	
SL-006-SA5C-SB-9.0-10.0	SELENIUM	J	0.241	0.431	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0704	0.108	PQL	mg/Kg	
SL-007-SA5C-SB-4.0-5.0	ANTIMONY	J	0.156	0.215	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0887	0.108	PQL	mg/Kg	
	SELENIUM	J	0.141	0.431	PQL	mg/Kg	
	SILVER	J	0.0301	0.108	PQL	mg/Kg	
SL-007-SA5C-SB-9.0-10.0	ANTIMONY	J	0.132	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.185	0.428	PQL	mg/Kg	
	SILVER	J	0.0588	0.107	PQL	mg/Kg	
SL-075-SA5B-SS-0.0-0.5	ANTIMONY	J	0.193	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.418	PQL	mg/Kg	
SL-077-SA5B-SS-0.0-0.5	SELENIUM	J	0.0944	0.422	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0576	0.106	PQL	mg/Kg	
SL-085-SA5B-SS-0.0-0.5	SELENIUM	J	0.237	0.412	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0715	0.103	PQL	mg/Kg	
SL-087-SA5B-SS-0.0-0.5	SELENIUM	J	0.136	0.424	PQL	mg/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	SELENIUM	J	0.334	0.423	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0585	0.106	PQL	mg/Kg	
SL-095-SA5B-SS-0.0-0.5	SELENIUM	J	0.159	0.405	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0526	0.101	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.79	1.1	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.82	1.1	PQL	mg/Kg	J (all detects)
SL-006-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)
SL-006-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.26	1.1	PQL	mg/Kg	J (all detects)
SL-075-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.46	1.1	PQL	mg/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.66	1.1	PQL	mg/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.1	PQL	mg/Kg	J (all detects)
SL-095-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.52	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-032-SIV-SD-0.0-0.5	MERCURY	J	0.0148	0.111	PQL	mg/Kg	J (all detects)
SL-001-SA5C-SB-9.0-10.0	MERCURY	J	0.0073	0.116	PQL	mg/Kg	J (all detects)
SL-003-SA5C-SB-4.0-5.0	MERCURY	J	0.0131	0.105	PQL	mg/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	MERCURY	J	0.0043	0.108	PQL	mg/Kg	J (all detects)
SL-077-SA5B-SS-0.0-0.5	MERCURY	J	0.0036	0.102	PQL	mg/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	MERCURY	J	0.0304	0.107	PQL	mg/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	MERCURY	J	0.0218	0.105	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-003-SA5C-SB-4.0-5.0	METHANOL	J	110	540	PQL	ug/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	METHANOL	J	140	550	PQL	ug/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-033-SIV-SD-0.0-0.5	ALPHA-BHC	J	0.16	0.18	PQL	ug/Kg	J (all detects)
SL-095-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.12	0.17	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	AROCLOR 1254	J	0.44	1.9	PQL	ug/Kg	J (all detects)
SED-033-SIV-SD-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.7 2.1	3.6 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-003-SA5C-SB-4.0-5.0	AROCLOR 1254 AROCLOR 1260	J J	1.3 0.61	1.8 1.8	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-006-SA5C-SB-4.0-5.0	AROCLOR 1254	J	0.97	1.9	PQL	ug/Kg	J (all detects)
SL-007-SA5C-SB-4.0-5.0	AROCLOR 1260 Aroclor 5460	J J	0.71 1.9	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-007-SA5C-SB-9.0-10.0	AROCLOR 1248 AROCLOR 1254 AROCLOR 1260	J J J	1.4 1.1 0.88	1.9 1.9 1.9	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-075-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.9	3.5	PQL	ug/Kg	J (all detects)
SL-077-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.4 1.3	1.8 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	Aroclor 5460	J	9.7	18	PQL	ug/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	Aroclor 5460	J	5.1	7.2	PQL	ug/Kg	J (all detects)
SL-091-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.8	7.2	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-075-SA5B-SS-0.0-0.5	DICAMBA	J	0.94	1.3	PQL	ug/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	2,4-DB MCPA MCPP	J J J	1.6 200 130	1.8 270 270	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-087-SA5B-SS-0.0-0.5	DICAMBA	J	0.54	1.3	PQL	ug/Kg	J (all detects)
SL-095-SA5B-SS-0.0-0.5	DICAMBA	J	0.55	1.3	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	METHYLENE CHLORIDE	J	0.97	5.1	PQL	ug/Kg	J (all detects)
SL-001-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	3.0	4.1	PQL	ug/Kg	J (all detects)
SL-001-SA5C-SB-9.0-10.0	2-BUTANONE (MEK) METHYLENE CHLORIDE TOLUENE	J J J	5.6 1.5 0.11	8.2 4.1 4.1	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-003-SA5C-SB-4.0-5.0	CHLOROFORM METHYLENE CHLORIDE	J J	0.13 2.4	4.0 4.0	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-006-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.63	4.3	PQL	ug/Kg	J (all detects)
SL-006-SA5C-SB-9.0-10.0	ACETONE METHYLENE CHLORIDE	J J	8.7 1.1	8.8 4.4	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-007-SA5C-SB-4.0-5.0	CHLOROFORM	J	0.14	4.0	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	2.5	4.0	PQL	ug/Kg	
SL-007-SA5C-SB-9.0-10.0	METHYLENE CHLORIDE	J	1.4	4.4	PQL	ug/Kg	J (all detects)
SL-085-SA5B-SS-0.0-0.5	METHYLENE CHLORIDE	J	1.5	5.5	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-032-SIV-SD-0.0-0.5	ACENAPHTHENE	J	43	190	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	37	190	PQL	ug/Kg	
	CARBAZOLE	J	24	190	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	120	190	PQL	ug/Kg	
	PHENANTHRENE	J	110	190	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP13-SA5C-QC-121310	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	J (all detects)
SED-032-SIV-SD-0.0-0.5	ACENAPHTHYLENE	J	0.49	1.9	PQL	ug/Kg	J (all detects)
SED-033-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	0.94	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	0.96	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.99	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	17	19	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
SL-003-SA5C-SB-4.0-5.0	BENZO(A)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.90	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.76	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	
SL-006-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	20	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.46	1.9	PQL	ug/Kg	
SL-007-SA5C-SB-9.0-10.0	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.5	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	12	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.98	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-075-SA5B-SS-0.0-0.5	ANTHRACENE	J	0.49	1.8	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	19	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.78	1.8	PQL	ug/Kg	
	Di-n-butylphthalate	J	8.2	19	PQL	ug/Kg	
SL-077-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.3	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.0	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	1.8	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE037 **Laboratory: LL**

EDD Filename: DE037_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-085-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	14	19	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	9.0	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.99	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.8	PQL	ug/Kg	
SL-087-SA5B-SS-0.0-0.5	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	Butylbenzylphthalate	J	14	20	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	0.91	1.8	PQL	ug/Kg	
SL-091-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.5	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	0.74	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	1.8	PQL	ug/Kg	
SL-095-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	16	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	

Method: 8315A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-006-SA5C-SB-9.0-10.0	FORMALDEHYDE	J	990	1600	PQL	ug/Kg	J (all detects)

LDC #: 25337I4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-5-11
SDG #: DE037 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CR
2nd Reviewer: A

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

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	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, Mo, Ag <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	Ba-16%, Pb-12%, Zn-11% :J/UJ
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	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-006-SA5C-SB-9.0-10.0	11	SL-095-SA5B-SS-0.0-0.5	21		31	
2	DUP13-SA5C-QC-121310	12	SL-091-SA5B-SS-0.0-0.5	22		32	
3	SL-006-SA5C-SB-4.0-5.0	13	SL-003-SA5B-SS-4.0-5.0	23		33	
4	EB-15-SA5B-121310 W	14	SL-001-SA5B-SS-4.0-5.0	24		34	
5	SL-007-SA5C-SB-4.0-5.0	15	SL-001-SA5B-SS-9.0-10.0	25		35	
6	SL-007-SA5C-SB-9.0-10.0	16	SED-032-SIV-SD-0.0-0.5	26		36	
7	SL-075-SA5B-SS-0.0-0.5	17	SED-033-SIV-SD-0.0-0.5	27		37	
8	SL-077-SA5B-SS-0.0-0.5	18	SL-006-SA5C-SB-4.0-5.0MS	28		38	
9	SL-085-SA5B-SS-0.0-0.5	19	SL-006-SA5C-SB-4.0-5.0MSD	29		39	
10	SL-087-SA5B-SS-0.0-0.5	20	SL-006-SA5C-SB-4.0-5.0DUP	30		40	

Notes: _____

LDC #: 25337I4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: CR
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: 12/13/10 Soil factor applied 100x
Field blank type: (circle one) Field Blank / Rinsate / Other: Associated Samples: All Soil

Analyte	Blank ID	Sample Identification										
	8	Action Level	No Qualifiers (>5x)									
Pb	0.099	0.0495										

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".

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	TB-121410	6164943	TB	5030B	8015M	IV
14-Dec-2010	TB-121410	6164943	TB	5030B	8260B SIM	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3050B	6010B	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3050B	6020	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3060A	7199	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3550B	8081A	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3550B	8082	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3550B	8151A	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3550B	8270C	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	3550B	8270C SIM	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	Gen Prep	9045M	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	METHOD	300.0	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	METHOD	314.0	IV
14-Dec-2010	SED-023-SIV-SD-0.0-0.5	6164949	N	METHOD	7471A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3050B	6010B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3060A	7199	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3546	1625C	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3550B	8015B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3550B	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3550B	8082	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3550B	8270C	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	3550B	8270C SIM	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	5035	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	5035	8260B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	5035	8260B SIM	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	8330	8330A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	Gen Prep	9045M	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	300.0	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	314.0	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	7471A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	8015B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	8315A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0	6164941	N	METHOD	9012B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D221008	DUP	METHOD	7471A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D221205A	DUP	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D221205C	DUP	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D221205D	DUP	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D221728B	DUP	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D221855	DUP	3050B	6010B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D270013A	DUP	METHOD	300.0	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D271326A	DUP	3060A	7199	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0DUP	P164941D271511A	DUP	METHOD	314.0	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M221010	MSD	METHOD	7471A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M221211A	MSD	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M221211C	MSD	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M221211D	MSD	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M221733B	MSD	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M221903	MSD	3050B	6010B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M261236	MSD	3550B	8270C	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M261843	MSD	3546	1625C	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
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M261915	MSD	3550B	8270C SIM	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MSD	P164941M322108A	MSD	METHOD	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R221009	MS	METHOD	7471A	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R221208A	MS	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R221208C	MS	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R221208D	MS	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R221730B	MS	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R221859	MS	3050B	6010B	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R261202	MS	3550B	8270C	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R261826	MS	3546	1625C	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R261841	MS	3550B	8270C SIM	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R270028A	MS	METHOD	300.0	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R271230A	MS	3060A	7199	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R271535A	MS	METHOD	314.0	IV
14-Dec-2010	SL-002-SA5C-SB-4.0-5.0MS	P164941R322052A	MS	METHOD	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3050B	6010B	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3050B	6020	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3060A	7199	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3546	1625C	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3550B	8015B	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3550B	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3550B	8082	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3550B	8270C	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	3550B	8270C SIM	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	5035	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	5035	8260B	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
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	5035	8260B SIM	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	8330	8330A	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	Gen Prep	9045M	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	300.0	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	314.0	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	7471A	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	8015B	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	8015M	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	8315A	IV
14-Dec-2010	SL-002-SA5C-SB-9.0-10.0	6164942	N	METHOD	9012B	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3050B	6010B	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3050B	6020	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3060A	7199	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3550B	8081A	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3550B	8082	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3550B	8151A	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3550B	8270C	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	3550B	8270C SIM	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	Gen Prep	9045M	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	METHOD	300.0	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	METHOD	314.0	IV
14-Dec-2010	SED-022-SIV-SD-0.0-0.5	6164950	N	METHOD	7471A	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3050B	6010B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3050B	6020	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3060A	7199	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3546	1625C	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
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3550B	8015B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3550B	8015M	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3550B	8082	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3550B	8270C	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	3550B	8270C SIM	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	5035	8015M	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	5035	8260B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	5035	8260B SIM	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	8330	8330A	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	Gen Prep	9045M	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	300.0	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	314.0	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	7471A	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	8015B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	8015M	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	8315A	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0	6164946	N	METHOD	9012B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0DUP	P164946D272028B	DUP	METHOD	9012B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0DUP	P164946D291300B	DUP	Gen Prep	9045M	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0MS	P164946R210016A	MS	5035	8260B	IV
14-Dec-2010	SL-004-SA5C-SB-4.0-5.0MS	P164946R272029B	MS	METHOD	9012B	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3050B	6010B	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3050B	6020	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3060A	7199	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3550B	8081A	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	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
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3550B	8151A	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3550B	8270C	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	3550B	8270C SIM	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	Gen Prep	9045M	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	METHOD	300.0	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	METHOD	314.0	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	METHOD	6850	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5	6164948	N	METHOD	7471A	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5MSD	P164948M241816A	MSD	METHOD	6850	IV
14-Dec-2010	SED-024-SIV-SD-0.0-0.5MS	P164948R241809A	MS	METHOD	6850	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3050B	6010B	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3050B	6020	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3060A	7199	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3546	1625C	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3550B	8015B	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3550B	8015M	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3550B	8082	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3550B	8270C	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	3550B	8270C SIM	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	5035	8015M	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	5035	8260B	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	5035	8260B SIM	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	8330	8330A	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	Gen Prep	9045M	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	300.0	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	314.0	IV

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

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	7471A	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	8015B	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	8015M	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	8315A	IV
14-Dec-2010	SL-004-SA5C-SB-9.0-10.0	6164945	N	METHOD	9012B	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	3005A	6010B	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	3020A	6020	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	3510C	8081A	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	3510C	8082	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	3510C	8270C	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	3510C	8270C SIM	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	5030B	8015M	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	5030B	8260B	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	5030B	8260B SIM	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	Gen Prep	300.0	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	Gen Prep	314.0	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	Gen Prep	7199	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	METHOD	7470A	IV
14-Dec-2010	EB02-SA5B-121410	6164944	EB	METHOD	8151A	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3050B	6010B	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3050B	6020	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3060A	7199	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3550B	8081A	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3550B	8082	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3550B	8151A	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3550B	8270C	IV

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	3550B	8270C SIM	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	Gen Prep	300.0	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	Gen Prep	9045M	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	METHOD	314.0	IV
14-Dec-2010	SL-128-SA5B-SS-0.0-0.5	6164954	N	METHOD	7471A	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3050B	6010B	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3050B	6020	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3060A	7199	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3550B	8081A	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3550B	8082	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3550B	8151A	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3550B	8270C	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	3550B	8270C SIM	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	Gen Prep	300.0	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	Gen Prep	9045M	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	METHOD	314.0	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5	6164953	N	METHOD	7471A	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5DUP	P164953D270332B	DUP	Gen Prep	300.0	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5DUP	P164953D272024B	DUP	METHOD	314.0	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5MS	P164953R270346B	MS	Gen Prep	300.0	IV
14-Dec-2010	SL-129-SA5B-SS-0.0-0.5MS	P164953R272048B	MS	METHOD	314.0	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3050B	6010B	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3050B	6020	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3060A	7199	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3550B	8081A	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	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
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3550B	8151A	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3550B	8270C	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	3550B	8270C SIM	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	Gen Prep	9045M	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	METHOD	300.0	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	METHOD	314.0	IV
14-Dec-2010	SL-125-SA5B-SS-0.0-0.5	6164951	N	METHOD	7471A	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3050B	6010B	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3050B	6020	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3060A	7199	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3550B	8081A	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3550B	8082	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3550B	8151A	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3550B	8270C	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	3550B	8270C SIM	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	Gen Prep	9045M	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	METHOD	300.0	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	METHOD	314.0	IV
14-Dec-2010	SL-126-SA5B-SS-0.0-0.5	6164952	N	METHOD	7471A	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	3050B	6010B	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	3050B	6020	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	3060A	7199	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	3550B	8082	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	3550B	8270C	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	3550B	8270C SIM	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	5035	8260B	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
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	5035	8260B SIM	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	Gen Prep	9045M	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	METHOD	300.0	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	METHOD	314.0	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0	6164947	N	METHOD	7471A	IV
14-Dec-2010	SL-140-SA5C-SB-3.0-4.0DUP	P164947D291400A	DUP	Gen Prep	9045M	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3050B	6010B	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3050B	6020	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3060A	7199	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3550B	8081A	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3550B	8082	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3550B	8151A	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3550B	8270C	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	3550B	8270C SIM	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	Gen Prep	300.0	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	Gen Prep	9045M	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	METHOD	314.0	IV
14-Dec-2010	SED-026-SIV-SD-0.0-0.5	6164956	N	METHOD	7471A	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3050B	6010B	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3050B	6020	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3060A	7199	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3550B	8081A	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3550B	8082	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3550B	8151A	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3550B	8270C	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	3550B	8270C SIM	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
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	Gen Prep	300.0	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	Gen Prep	9045M	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	METHOD	314.0	IV
14-Dec-2010	SED-027-SIV-SD-0.0-0.5	6164955	N	METHOD	7471A	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3050B	6010B	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3050B	6020	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3060A	7199	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3546	1625C	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3550B	8015B	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3550B	8015M	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3550B	8082	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3550B	8270C	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	3550B	8270C SIM	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	5035	8015M	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	5035	8260B	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	5035	8260B SIM	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	8330	8330A	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	Gen Prep	300.0	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	Gen Prep	9045M	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	METHOD	314.0	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	METHOD	7471A	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	METHOD	8015B	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	METHOD	8015M	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	METHOD	8315A	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0	6164957	N	METHOD	9012B	IV
14-Dec-2010	SL-060-SA5C-SB-10.0-11.0D	P164957D291400B	DUP	Gen Prep	9045M	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.7		0.93	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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	1.1	J	0.93	MDL	1.2	PQL	mg/Kg	J	Z, Q

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 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
Nitrate-NO3	1.1	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
Nitrate-NO3	1.6	J	0.95	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	0.95	J	0.92	MDL	1.1	PQL	mg/Kg	J	Z, Q
Nitrate-NO3	1.3	J	0.92	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
FLUORIDE	0.85	U	0.85	MDL	1.1	PQL	mg/Kg	UJ	Q

Sample ID: SL-129-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
FLUORIDE	1.2		0.84	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** AQ

Sample ID: EB02-SA5B-121410 ***Collected:*** 12/14/2010 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
IRON	0.0533	J	0.0522	MDL	0.200	PQL	mg/L	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-022-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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
BORON	4.54	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
LITHIUM	24.1		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	390		0.594	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	3120		19.1	MDL	53.1	PQL	mg/Kg	J	Q, A
SODIUM	79.9	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.34	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	0.900	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SED-023-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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	4.10	J	0.969	MDL	5.44	PQL	mg/Kg	J	Z
LITHIUM	22.7		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	405		0.610	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3290		19.6	MDL	54.4	PQL	mg/Kg	J	Q, A
SODIUM	67.3	J	40.6	MDL	109	PQL	mg/Kg	J	Z
TIN	2.38	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.16	J	0.914	MDL	5.44	PQL	mg/Kg	J	Z

Sample ID: SED-024-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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
BORON	3.73	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
LITHIUM	24.5		0.25	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	434		0.630	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	3150		20.2	MDL	56.2	PQL	mg/Kg	J	Q, A
SODIUM	68.9	J	41.9	MDL	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-024-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 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
TIN	2.66	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.51	J	0.944	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SED-026-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 3:22:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.12	J	1.02	MDL	5.74	PQL	mg/Kg	J	Z
LITHIUM	25.7		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	437		0.643	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3830		20.7	MDL	57.4	PQL	mg/Kg	J	Q, A
SODIUM	112	J	42.8	MDL	115	PQL	mg/Kg	J	Z
TIN	2.97	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

Sample ID: SED-027-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 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
BORON	4.15	J	1.03	MDL	5.79	PQL	mg/Kg	J	Z
LITHIUM	24.6		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	446		0.648	MDL	11.6	PQL	mg/Kg	J	Q
POTASSIUM	3150		20.8	MDL	57.9	PQL	mg/Kg	J	Q, A
SODIUM	86.1	J	43.2	MDL	116	PQL	mg/Kg	J	Z
TIN	2.57	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	1.31	J	0.972	MDL	5.79	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5C-SB-4.0-5.0 **Collected:** 12/14/2010 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
BORON	2.97	J	0.939	MDL	5.28	PQL	mg/Kg	J	Z
LITHIUM	22.8		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	330		0.591	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	2520		19.0	MDL	52.8	PQL	mg/Kg	J	Q, A
SODIUM	95.4	J	39.4	MDL	106	PQL	mg/Kg	J	Z
TIN	2.76	J	1.06	MDL	10.6	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-002-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 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
BORON	5.03	J	1.03	MDL	5.77	PQL	mg/Kg	J	Z
LITHIUM	27.6		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	421		0.646	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3910		20.8	MDL	57.7	PQL	mg/Kg	J	Q, A
TIN	3.01	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	5.23	J	0.970	MDL	5.77	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 ***Collected:*** 12/14/2010 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
BORON	4.55	J	1.02	MDL	5.74	PQL	mg/Kg	J	Z
LITHIUM	28.2		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	311		0.643	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	3660		20.7	MDL	57.4	PQL	mg/Kg	J	Q, A
TIN	2.90	J	1.15	MDL	11.5	PQL	mg/Kg	U	B
Zirconium	3.75	J	0.964	MDL	5.74	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 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
LITHIUM	28.1		0.26	MDL	2.4	PQL	mg/Kg	J	A
PHOSPHORUS	468		0.666	MDL	11.9	PQL	mg/Kg	J	Q
POTASSIUM	4790		21.4	MDL	59.5	PQL	mg/Kg	J	Q, A
TIN	2.81	J	1.19	MDL	11.9	PQL	mg/Kg	U	B
Zirconium	4.89	J	1.00	MDL	5.95	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5C-SB-10.0-11.0 ***Collected:*** 12/14/2010 4:18:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	0.988	J	0.983	MDL	5.52	PQL	mg/Kg	J	Z
LITHIUM	31.9		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	537		0.618	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3500		19.9	MDL	55.2	PQL	mg/Kg	J	Q, A
TIN	2.92	J	1.10	MDL	11.0	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-125-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
BORON	2.74	J	0.921	MDL	5.18	PQL	mg/Kg	J	Z
LITHIUM	27.9		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	795		0.580	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	5670		18.6	MDL	51.8	PQL	mg/Kg	J	Q, A
SODIUM	89.2	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	2.99	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.36	J	0.870	MDL	5.18	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
BORON	2.45	J	0.925	MDL	5.19	PQL	mg/Kg	J	Z
LITHIUM	27.4		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	736		0.582	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	4480		18.7	MDL	51.9	PQL	mg/Kg	J	Q, A
SODIUM	100	J	38.8	MDL	104	PQL	mg/Kg	J	Z
TIN	2.93	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	4.40	J	0.873	MDL	5.19	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
BORON	2.87	J	0.907	MDL	5.10	PQL	mg/Kg	J	Z
LITHIUM	25.0		0.22	MDL	2.0	PQL	mg/Kg	J	A
PHOSPHORUS	587		0.571	MDL	10.2	PQL	mg/Kg	J	Q
POTASSIUM	5080		18.4	MDL	51.0	PQL	mg/Kg	J	Q, A
SODIUM	78.0	J	38.0	MDL	102	PQL	mg/Kg	J	Z
TIN	3.05	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.38	J	0.857	MDL	5.10	PQL	mg/Kg	J	Z

Sample ID: SL-129-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
BORON	2.49	J	0.904	MDL	5.08	PQL	mg/Kg	J	Z
LITHIUM	27.3		0.22	MDL	2.0	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-129-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
PHOSPHORUS	740		0.569	MDL	10.2	PQL	mg/Kg	J	Q
POTASSIUM	4580		18.3	MDL	50.8	PQL	mg/Kg	J	Q, A
SODIUM	84.5	J	37.9	MDL	102	PQL	mg/Kg	J	Z
TIN	2.55	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	1.62	J	0.853	MDL	5.08	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA5C-SB-3.0-4.0 *Collected:* 12/14/2010 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
BORON	2.76	J	0.952	MDL	5.35	PQL	mg/Kg	J	Z
LITHIUM	19.6		0.24	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	131		0.599	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	1450		19.3	MDL	53.5	PQL	mg/Kg	J	Q, A
TIN	2.61	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.03	J	0.898	MDL	5.35	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** AQ

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 12:30:00 *Analysis Type:* REA5 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	0.000075	J	0.000052	MDL	0.0010	PQL	mg/L	J	Z

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 12:30:00 *Analysis Type:* REA7 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.00032	J	0.00025	MDL	0.00050	PQL	mg/L	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-022-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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
LEAD	10.5		0.0110	MDL	0.212	PQL	mg/Kg	J	Q, E, A

Sample ID: SED-022-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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	0.184	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SED-022-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 10:08:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.611		0.0531	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SED-022-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 10:08:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	110		0.115	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SED-022-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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	0.246		0.0637	MDL	0.212	PQL	mg/Kg	U	B
ARSENIC	5.23		0.0637	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.438		0.0170	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.358		0.0382	MDL	0.106	PQL	mg/Kg	UJ	Q, B
CHROMIUM	22.4		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E
COBALT	8.04		0.0212	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	9.68		0.0700	MDL	0.424	PQL	mg/Kg	J	Q, E
NICKEL	12.6		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E
SILVER	0.0842	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.377		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	44.8		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	99.0		0.594	MDL	3.18	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **METALS**

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

Sample ID: **SED-023-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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
LEAD	14.2		0.0115	MDL	0.222	PQL	mg/Kg	J	Q, E, A

Sample ID: **SED-023-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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	0.313	J	0.0444	MDL	0.444	PQL	mg/Kg	J	Z

Sample ID: **SED-023-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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
MOLYBDENUM	0.678		0.0555	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: **SED-023-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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
BARIUM	122		0.120	MDL	0.444	PQL	mg/Kg	J	E, A

Sample ID: **SED-023-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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	0.235		0.0666	MDL	0.222	PQL	mg/Kg	U	B
ARSENIC	6.07		0.0666	MDL	0.444	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.472		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.216		0.0400	MDL	0.111	PQL	mg/Kg	UJ	Q, B
CHROMIUM	23.2		0.133	MDL	0.444	PQL	mg/Kg	J	Q, E
COBALT	7.05		0.0222	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	10.5		0.0733	MDL	0.444	PQL	mg/Kg	J	Q, E
NICKEL	14.0		0.111	MDL	0.444	PQL	mg/Kg	J	Q, E
SILVER	0.0467	J	0.0133	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.357		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	48.9		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E
ZINC	93.4		0.622	MDL	3.33	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-024-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 11:16:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.206	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SED-024-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 11:16:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.570		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SED-024-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 11:16:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	99.6		0.120	MDL	0.445	PQL	mg/Kg	J	E, A

Sample ID: SED-024-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 11:16:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.194	J	0.0668	MDL	0.223	PQL	mg/Kg	U	B
ARSENIC	4.96		0.0668	MDL	0.445	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.455		0.0178	MDL	0.111	PQL	mg/Kg	J	Q
CADMIUM	0.251		0.0401	MDL	0.111	PQL	mg/Kg	UJ	Q, B
CHROMIUM	21.8		0.134	MDL	0.445	PQL	mg/Kg	J	Q, E
COBALT	7.26		0.0223	MDL	0.111	PQL	mg/Kg	J	Q
COPPER	10.3		0.0735	MDL	0.445	PQL	mg/Kg	J	Q, E
LEAD	16.7		0.0116	MDL	0.223	PQL	mg/Kg	J	Q, E, A
NICKEL	14.2		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E
SILVER	0.0600	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z, Q
THALLIUM	0.300		0.0334	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	48.1		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, E
ZINC	82.8		0.623	MDL	3.34	PQL	mg/Kg	J	E, A

Sample ID: SED-026-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 3:22:00 **Analysis Type:** REA **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.260		0.0413	MDL	0.115	PQL	mg/Kg	UJ	Q, B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.177	J	0.0459	MDL	0.459	PQL	mg/Kg	J	Z

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.940		0.0574	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	150		0.124	MDL	0.459	PQL	mg/Kg	J	E, A

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.128	J	0.0689	MDL	0.230	PQL	mg/Kg	U	B
ARSENIC	6.61		0.0689	MDL	0.459	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.666		0.0184	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	24.3		0.138	MDL	0.459	PQL	mg/Kg	J	Q, E
COBALT	7.27		0.0230	MDL	0.115	PQL	mg/Kg	J	Q
COPPER	11.3		0.0758	MDL	0.459	PQL	mg/Kg	J	Q, E
LEAD	19.5		0.0119	MDL	0.230	PQL	mg/Kg	J	Q, E, A
NICKEL	15.0		0.115	MDL	0.459	PQL	mg/Kg	J	Q, E
SILVER	0.575		0.0138	MDL	0.115	PQL	mg/Kg	J	Q
THALLIUM	0.465		0.0345	MDL	0.115	PQL	mg/Kg	J	Q
VANADIUM	46.8		0.0253	MDL	0.115	PQL	mg/Kg	J	Q, E
ZINC	105		0.643	MDL	3.45	PQL	mg/Kg	J	E, A

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:59:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:59:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.731		0.0567	MDL	0.113	PQL	mg/Kg	J	Q

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:59:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	126		0.123	MDL	0.454	PQL	mg/Kg	J	E, A

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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	0.164	J	0.0681	MDL	0.227	PQL	mg/Kg	U	B
ARSENIC	6.17		0.0681	MDL	0.454	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.500		0.0182	MDL	0.113	PQL	mg/Kg	J	Q
CADMIUM	0.259		0.0408	MDL	0.113	PQL	mg/Kg	UJ	Q, B
CHROMIUM	26.8		0.136	MDL	0.454	PQL	mg/Kg	J	Q, E
COBALT	7.14		0.0227	MDL	0.113	PQL	mg/Kg	J	Q
COPPER	10.6		0.0749	MDL	0.454	PQL	mg/Kg	J	Q, E
LEAD	16.2		0.0118	MDL	0.227	PQL	mg/Kg	J	Q, E, A
NICKEL	15.8		0.113	MDL	0.454	PQL	mg/Kg	J	Q, E
SILVER	0.146		0.0136	MDL	0.113	PQL	mg/Kg	J	Q
THALLIUM	0.347		0.0340	MDL	0.113	PQL	mg/Kg	J	Q
VANADIUM	54.9		0.0250	MDL	0.113	PQL	mg/Kg	J	Q, E
ZINC	88.1		0.635	MDL	3.40	PQL	mg/Kg	J	E, A

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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	0.101	J	0.0422	MDL	0.422	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 9:42:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.470		0.0528	MDL	0.106	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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	63.6		0.114	MDL	0.422	PQL	mg/Kg	J	E, A

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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	0.160	J	0.0633	MDL	0.211	PQL	mg/Kg	U	B
ARSENIC	5.59		0.0633	MDL	0.422	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.531		0.0169	MDL	0.106	PQL	mg/Kg	J	Q
CADMIUM	0.0891	J	0.0380	MDL	0.106	PQL	mg/Kg	UJ	Q, B
CHROMIUM	14.1		0.127	MDL	0.422	PQL	mg/Kg	J	Q, E
COBALT	5.63		0.0211	MDL	0.106	PQL	mg/Kg	J	Q
COPPER	5.77		0.0697	MDL	0.422	PQL	mg/Kg	J	Q, E
LEAD	4.71		0.0110	MDL	0.211	PQL	mg/Kg	J	Q, E, A
NICKEL	8.46		0.106	MDL	0.422	PQL	mg/Kg	J	Q, E
SILVER	0.0148	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.356		0.0317	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	29.5		0.0232	MDL	0.106	PQL	mg/Kg	J	Q, E
ZINC	59.4		0.591	MDL	3.17	PQL	mg/Kg	J	E, A

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 9:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.186	J	0.0471	MDL	0.471	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 9:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.624		0.0588	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 9:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	160		0.127	MDL	0.471	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-002-SA5C-SB-9.0-10.0 **Collected:** 12/14/2010 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
ARSENIC	8.72		0.0706	MDL	0.471	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.902		0.0188	MDL	0.118	PQL	mg/Kg	J	Q
CADMIUM	0.454		0.0424	MDL	0.118	PQL	mg/Kg	J	Q
CHROMIUM	41.1		0.141	MDL	0.471	PQL	mg/Kg	J	Q, E
COBALT	9.79		0.0235	MDL	0.118	PQL	mg/Kg	J	Q
COPPER	16.7		0.0777	MDL	0.471	PQL	mg/Kg	J	Q, E
LEAD	13.1		0.0122	MDL	0.235	PQL	mg/Kg	J	Q, E, A
NICKEL	19.9		0.118	MDL	0.471	PQL	mg/Kg	J	Q, E
SILVER	0.0442	J	0.0141	MDL	0.118	PQL	mg/Kg	J	Z, Q
THALLIUM	0.381		0.0353	MDL	0.118	PQL	mg/Kg	J	Q
VANADIUM	76.0		0.0259	MDL	0.118	PQL	mg/Kg	J	Q, E
ZINC	80.0		0.659	MDL	3.53	PQL	mg/Kg	J	E, A

Sample ID: SL-004-SA5C-SB-4.0-5.0 **Collected:** 12/14/2010 11:11:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0746	J	0.0473	MDL	0.473	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 **Collected:** 12/14/2010 11:11:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.470		0.0591	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5C-SB-4.0-5.0 **Collected:** 12/14/2010 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
BARIUM	160		0.128	MDL	0.473	PQL	mg/Kg	J	E, A

Sample ID: SL-004-SA5C-SB-4.0-5.0 **Collected:** 12/14/2010 11:11:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.70		0.0709	MDL	0.473	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.928		0.0189	MDL	0.118	PQL	mg/Kg	J	Q
CADMIUM	0.237		0.0425	MDL	0.118	PQL	mg/Kg	UJ	Q, B
CHROMIUM	39.0		0.142	MDL	0.473	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-004-SA5C-SB-4.0-5.0 ***Collected:*** 12/14/2010 11:11:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	9.82		0.0236	MDL	0.118	PQL	mg/Kg	J	Q
COPPER	15.8		0.0780	MDL	0.473	PQL	mg/Kg	J	Q, E
LEAD	12.5		0.0123	MDL	0.236	PQL	mg/Kg	J	Q, E, A
NICKEL	17.8		0.118	MDL	0.473	PQL	mg/Kg	J	Q, E
SILVER	0.0893	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z, Q
THALLIUM	0.422		0.0354	MDL	0.118	PQL	mg/Kg	J	Q
VANADIUM	71.3		0.0260	MDL	0.118	PQL	mg/Kg	J	Q, E
ZINC	70.9		0.662	MDL	3.54	PQL	mg/Kg	J	E, A

Sample ID: SL-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 11:18:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.252	J	0.0467	MDL	0.467	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 11:18:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.801		0.0583	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SL-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 11:18:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	183		0.126	MDL	0.467	PQL	mg/Kg	J	E, A

Sample ID: SL-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 11:18:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	8.20		0.0700	MDL	0.467	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.889		0.0187	MDL	0.117	PQL	mg/Kg	J	Q
CADMIUM	0.454		0.0420	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	43.0		0.140	MDL	0.467	PQL	mg/Kg	J	Q, E
COBALT	10.0		0.0233	MDL	0.117	PQL	mg/Kg	J	Q
COPPER	17.9		0.0770	MDL	0.467	PQL	mg/Kg	J	Q, E
LEAD	14.0		0.0121	MDL	0.233	PQL	mg/Kg	J	Q, E, A
NICKEL	20.3		0.117	MDL	0.467	PQL	mg/Kg	J	Q, E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-004-SA5C-SB-9.0-10.0 **Collected:** 12/14/2010 11:18:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0645	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z, Q
THALLIUM	0.439		0.0350	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	79.2		0.0257	MDL	0.117	PQL	mg/Kg	J	Q, E
ZINC	96.1		0.653	MDL	3.50	PQL	mg/Kg	J	E, A

Sample ID: SL-060-SA5C-SB-10.0-11.0 **Collected:** 12/14/2010 4:18:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.268	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-060-SA5C-SB-10.0-11.0 **Collected:** 12/14/2010 4:18:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.12		0.0552	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-060-SA5C-SB-10.0-11.0 **Collected:** 12/14/2010 4:18:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	183		0.119	MDL	0.442	PQL	mg/Kg	J	E, A

Sample ID: SL-060-SA5C-SB-10.0-11.0 **Collected:** 12/14/2010 4:18:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	12.5		0.0662	MDL	0.442	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.913		0.0177	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.220		0.0397	MDL	0.110	PQL	mg/Kg	UJ	Q, B
CHROMIUM	37.4		0.132	MDL	0.442	PQL	mg/Kg	J	Q, E
COBALT	11.7		0.0221	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	19.2		0.0729	MDL	0.442	PQL	mg/Kg	J	Q, E
LEAD	12.3		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E, A
NICKEL	23.8		0.110	MDL	0.442	PQL	mg/Kg	J	Q, E
SILVER	0.0336	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.657		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	71.0		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, E
ZINC	119		0.618	MDL	3.31	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-125-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
LEAD	14.3		0.0108	MDL	0.207	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-125-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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	0.210	J	0.0414	MDL	0.414	PQL	mg/Kg	J	Z

Sample ID: SL-125-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 2:00:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.26		0.0518	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-125-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 2:00:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.112	MDL	0.414	PQL	mg/Kg	J	E, A

Sample ID: SL-125-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
ARSENIC	9.40		0.0621	MDL	0.414	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.893		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.489		0.0373	MDL	0.104	PQL	mg/Kg	J	Q
CHROMIUM	37.2		0.124	MDL	0.414	PQL	mg/Kg	J	Q, E
COBALT	9.90		0.0207	MDL	0.104	PQL	mg/Kg	J	Q
COPPER	21.3		0.0683	MDL	0.414	PQL	mg/Kg	J	Q, E
NICKEL	23.4		0.104	MDL	0.414	PQL	mg/Kg	J	Q, E
SILVER	0.414		0.0124	MDL	0.104	PQL	mg/Kg	J	Q
THALLIUM	0.522		0.0311	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	63.6		0.0228	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	146		0.580	MDL	3.11	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
LEAD	16.5		0.0108	MDL	0.208	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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	0.169	J	0.0416	MDL	0.416	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
MOLYBDENUM	1.11		0.0519	MDL	0.104	PQL	mg/Kg	J	Q

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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	115		0.112	MDL	0.416	PQL	mg/Kg	J	E, A

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:20:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	9.68		0.0623	MDL	0.416	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.852		0.0166	MDL	0.104	PQL	mg/Kg	J	Q
CADMIUM	0.387		0.0374	MDL	0.104	PQL	mg/Kg	UJ	Q, B
CHROMIUM	34.5		0.125	MDL	0.416	PQL	mg/Kg	J	Q, E
COBALT	9.55		0.0208	MDL	0.104	PQL	mg/Kg	J	Q
COPPER	19.2		0.0686	MDL	0.416	PQL	mg/Kg	J	Q, E
NICKEL	20.6		0.104	MDL	0.416	PQL	mg/Kg	J	Q, E
SILVER	0.342		0.0125	MDL	0.104	PQL	mg/Kg	J	Q
THALLIUM	0.435		0.0312	MDL	0.104	PQL	mg/Kg	J	Q
VANADIUM	60.5		0.0229	MDL	0.104	PQL	mg/Kg	J	Q, E
ZINC	140		0.582	MDL	3.12	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:35:00 ***Analysis Type:*** REA ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.307		0.0378	MDL	0.105	PQL	mg/Kg	UJ	Q, B
LEAD	16.6		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:35:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.225	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:35:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.16		0.0525	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:35:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	128		0.113	MDL	0.420	PQL	mg/Kg	J	E, A

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:35:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.233		0.0630	MDL	0.210	PQL	mg/Kg	U	B
ARSENIC	8.40		0.0630	MDL	0.420	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.838		0.0168	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	46.1		0.126	MDL	0.420	PQL	mg/Kg	J	Q, E
COBALT	10.3		0.0210	MDL	0.105	PQL	mg/Kg	J	Q
COPPER	19.9		0.0693	MDL	0.420	PQL	mg/Kg	J	Q, E
NICKEL	27.5		0.105	MDL	0.420	PQL	mg/Kg	J	Q, E
SILVER	0.0991	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.479		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	59.1		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, E
ZINC	118		0.588	MDL	3.15	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
LEAD	16.0		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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	0.242	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.23		0.0523	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	120		0.113	MDL	0.418	PQL	mg/Kg	J	E, A

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
ARSENIC	10.9		0.0627	MDL	0.418	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.03		0.0167	MDL	0.105	PQL	mg/Kg	J	Q
CADMIUM	0.468		0.0376	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	38.0		0.125	MDL	0.418	PQL	mg/Kg	J	Q, E
COBALT	10.4		0.0209	MDL	0.105	PQL	mg/Kg	J	Q
COPPER	21.9		0.0690	MDL	0.418	PQL	mg/Kg	J	Q, E
NICKEL	22.6		0.105	MDL	0.418	PQL	mg/Kg	J	Q, E
SILVER	0.133		0.0125	MDL	0.105	PQL	mg/Kg	J	Q
THALLIUM	0.491		0.0314	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	64.6		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, E
ZINC	157		0.585	MDL	3.14	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-140-SA5C-SB-3.0-4.0 ***Collected:*** 12/14/2010 2:28:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0532	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SL-140-SA5C-SB-3.0-4.0 ***Collected:*** 12/14/2010 2:28:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.412		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-140-SA5C-SB-3.0-4.0 ***Collected:*** 12/14/2010 2:28:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	132		0.119	MDL	0.441	PQL	mg/Kg	J	E, A

Sample ID: SL-140-SA5C-SB-3.0-4.0 ***Collected:*** 12/14/2010 2:28:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.169	J	0.0661	MDL	0.220	PQL	mg/Kg	U	B
ARSENIC	6.88		0.0661	MDL	0.441	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.666		0.0176	MDL	0.110	PQL	mg/Kg	J	Q
CADMIUM	0.0533	J	0.0396	MDL	0.110	PQL	mg/Kg	UJ	Q, B
CHROMIUM	24.6		0.132	MDL	0.441	PQL	mg/Kg	J	Q, E
COBALT	4.65		0.0220	MDL	0.110	PQL	mg/Kg	J	Q
COPPER	8.83		0.0727	MDL	0.441	PQL	mg/Kg	J	Q, E
LEAD	8.73		0.0115	MDL	0.220	PQL	mg/Kg	J	Q, E, A
NICKEL	11.0		0.110	MDL	0.441	PQL	mg/Kg	J	Q, E
SILVER	0.0480	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.352		0.0330	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	50.1		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, E
ZINC	49.0		0.617	MDL	3.30	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
HEXAVALENT CHROMIUM	0.32	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 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
HEXAVALENT CHROMIUM	0.51	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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	0.42	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-129-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
HEXAVALENT CHROMIUM	0.47	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SED-022-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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	0.0220	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SED-023-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
MERCURY	0.0082	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SED-024-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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	0.0121	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SED-027-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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	0.0513	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 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
MERCURY	0.0046	J	0.0034	MDL	0.119	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 ***Collected:*** 12/14/2010 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
MERCURY	0.0138	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 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
MERCURY	0.0068	J	0.0034	MDL	0.120	PQL	mg/Kg	J	Z

Sample ID: SL-125-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
MERCURY	0.0113	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-126-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 2:20:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0113	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
MERCURY	0.0117	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-129-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
MERCURY	0.0101	J	0.0029	MDL	0.103	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-140-SA5C-SB-3.0-4.0 *Collected:* 12/14/2010 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
MERCURY	0.0063	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix:** SO

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
Propylene glycol	5.3	U	5.3	MDL	13	PQL	mg/Kg	UJ	L

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 9:42:00 *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)	0.59	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	0.74	J	0.43	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 9:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Propylene glycol	6.0	U	6.0	MDL	15	PQL	mg/Kg	UJ	L

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 9:50:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	0.96	J	0.48	MDL	1.4	PQL	mg/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
Propylene glycol	6.0	U	6.0	MDL	15	PQL	mg/Kg	UJ	L

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 11:11:00 *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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-004-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 11:18:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Propylene glycol	6.0	U	6.0	MDL	15	PQL	mg/Kg	UJ	L

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Propylene glycol	5.7	U	5.7	MDL	14	PQL	mg/Kg	UJ	L

Method Category: SVOA

Method: 8081A **Matrix: AQ**

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 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
4,4'-DDT	0.0048	U	0.0048	MDL	0.019	PQL	ug/L	UJ	C
ENDOSULFAN II	0.014	U	0.014	MDL	0.019	PQL	ug/L	UJ	C

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SED-022-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 10:08:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	0.96	J	0.71	MDL	3.7	PQL	ug/Kg	J	Z
4,4'-DDT	1.6	J	0.71	MDL	3.7	PQL	ug/Kg	J	Z, *XIII
DELTA-BHC	2.6		0.39	MDL	1.8	PQL	ug/Kg	J	*XIII
ENDRIN ALDEHYDE	1.8	J	0.71	MDL	3.7	PQL	ug/Kg	J	Z, *XIII
gamma-BHC (Lindane)	2.7		0.37	MDL	1.8	PQL	ug/Kg	J	*XIII

Sample ID: SED-023-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
DELTA-BHC	0.26	J	0.20	MDL	0.93	PQL	ug/Kg	J	Z, *XIII
HEPTACHLOR	0.56	J	0.34	MDL	0.93	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-024-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 11:16:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.93	J	0.21	MDL	0.95	PQL	ug/Kg	J	Z, *XIII
HEPTACHLOR	0.39	J	0.34	MDL	0.95	PQL	ug/Kg	J	Z, *XIII

Sample ID: SED-026-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 3:22:00 ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	4.4		0.38	MDL	2.0	PQL	ug/Kg	J	C

Sample ID: SED-026-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 3:22:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	1.9	U	1.9	MDL	1.9	PQL	ug/Kg	UJ	C
ALPHA-BHC	0.066	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z, *XIII
DIELDRIN	0.87	U	0.87	MDL	0.87	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.092	U	0.092	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.44	U	0.44	MDL	0.44	PQL	ug/Kg	UJ	C
ENDRIN	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.64	U	0.64	MDL	0.64	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.077	U	0.077	MDL	0.39	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.16	U	0.16	MDL	0.19	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.49	U	0.49	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.42	U	0.42	MDL	0.42	PQL	ug/Kg	UJ	C

Sample ID: SED-027-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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
4,4'-DDE	0.69	U	0.69	MDL	0.69	PQL	ug/Kg	UJ	C
4,4'-DDT	2.2	U	2.2	MDL	2.2	PQL	ug/Kg	UJ	C
DIELDRIN	0.22	U	0.22	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.051	U	0.051	MDL	0.19	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.13	U	0.13	MDL	0.39	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.49		0.076	MDL	0.39	PQL	ug/Kg	J	C
ENDRIN	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.61	U	0.61	MDL	0.61	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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
ENDRIN KETONE	0.076	U	0.076	MDL	0.39	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.39	U	0.39	MDL	0.39	PQL	ug/Kg	UJ	C
METHOXYCHLOR	1.3	U	1.3	MDL	1.9	PQL	ug/Kg	UJ	C
MIREX	0.61	U	0.61	MDL	0.61	PQL	ug/Kg	UJ	C

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
BETA-BHC	0.12	J	0.063	MDL	0.17	PQL	ug/Kg	J	Z
DELTA-BHC	0.042	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z, *XIII
gamma-BHC (Lindane)	0.065	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z

Sample ID: SL-128-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.4	U	2.4	MDL	2.4	PQL	ug/Kg	UJ	C
4,4'-DDT	0.90	U	0.90	MDL	0.90	PQL	ug/Kg	UJ	C
DIELDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	C
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	UJ	C
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	C
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.31	U	0.31	MDL	0.36	PQL	ug/Kg	UJ	C
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.12	U	0.12	MDL	0.18	PQL	ug/Kg	UJ	C
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
MIREX	0.26	U	0.26	MDL	0.36	PQL	ug/Kg	UJ	C

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.99	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z
4,4'-DDT	7.9		0.70	MDL	3.6	PQL	ug/Kg	J	C, M
DIELDRIN	1.0	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z, C, *XIII
ENDOSULFAN I	0.46	U	0.46	MDL	1.8	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.70	U	0.70	MDL	3.6	PQL	ug/Kg	UJ	C
ENDOSULFAN SULFATE	1.8	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z, C
ENDRIN	0.70	U	0.70	MDL	3.6	PQL	ug/Kg	UJ	C
ENDRIN ALDEHYDE	0.86	J	0.70	MDL	3.6	PQL	ug/Kg	J	Z, C, *XIII
ENDRIN KETONE	0.70	U	0.70	MDL	3.6	PQL	ug/Kg	UJ	C
HEPTACHLOR EPOXIDE	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	C
METHOXYCHLOR	3.6	U	3.6	MDL	18	PQL	ug/Kg	UJ	C
MIREX	0.70	U	0.70	MDL	3.6	PQL	ug/Kg	UJ	C

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
BETA-BHC	0.065	J	0.063	MDL	0.18	PQL	ug/Kg	J	Z
DELTA-BHC	0.093	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z, *XIII
gamma-BHC (Lindane)	0.058	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z, *XIII

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 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	0.096	U	0.096	MDL	0.48	PQL	ug/L	UJ	L
Aroclor 5442	0.096	U	0.096	MDL	0.48	PQL	ug/L	UJ	L
Aroclor 5460	0.096	U	0.096	MDL	0.48	PQL	ug/L	UJ	L

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-022-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 10:08:00 *Analysis Type:* RES *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	22	U	22	MDL	71	PQL	ug/Kg	UJ	L
Aroclor 5442	22	U	22	MDL	71	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SED-022-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 10:08:00 **Analysis Type:** RES **Dilution:** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	22	U	22	MDL	71	PQL	ug/Kg	UJ	L

Sample ID: SED-023-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 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
AROCLOR 1254	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S, *XIII
AROCLOR 1260	0.70	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, S, *XIII
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: SED-024-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 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
AROCLOR 1254	2.4		0.38	MDL	1.9	PQL	ug/Kg	J	S, *XIII
AROCLOR 1260	1.5	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, S, *XIII
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	3.1	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, S, L

Sample ID: SED-026-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 3:22:00 **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 1248	17		0.77	MDL	3.9	PQL	ug/Kg	J	S
AROCLOR 1254	18		0.77	MDL	3.9	PQL	ug/Kg	J	S, *XIII
AROCLOR 1260	12		0.77	MDL	3.9	PQL	ug/Kg	J	S
Aroclor 5432	2.3	U	2.3	MDL	7.7	PQL	ug/Kg	UJ	L
Aroclor 5442	2.3	U	2.3	MDL	7.7	PQL	ug/Kg	UJ	L
Aroclor 5460	22		2.3	MDL	7.7	PQL	ug/Kg	J	S, L

Sample ID: SED-027-SIV-SD-0.0-0.5 **Collected:** 12/14/2010 3:59:00 **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	11		0.76	MDL	3.9	PQL	ug/Kg	J	S, *XIII
Aroclor 5432	2.3	U	2.3	MDL	7.6	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-027-SIV-SD-0.0-0.5 ***Collected:*** 12/14/2010 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
Aroclor 5442	2.3	U	2.3	MDL	7.6	PQL	ug/Kg	UJ	L
Aroclor 5460	3.6	J	2.3	MDL	7.6	PQL	ug/Kg	J	Z, S, L

Sample ID: SL-002-SA5C-SB-4.0-5.0 ***Collected:*** 12/14/2010 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	3.5	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-002-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 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
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-004-SA5C-SB-4.0-5.0 ***Collected:*** 12/14/2010 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	3.9	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-004-SA5C-SB-9.0-10.0 ***Collected:*** 12/14/2010 11:18:00 ***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	0.66	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *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	1.2	J	0.38	MDL	2.0	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-125-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
AROCLOR 1254	21		0.35	MDL	1.8	PQL	ug/Kg	J	S, *XIII
AROCLOR 1260	3.1		0.35	MDL	1.8	PQL	ug/Kg	J	S
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	22		1.1	MDL	3.5	PQL	ug/Kg	J	S, L

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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 1260	0.50	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z, S, *XIII
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-128-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
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	9.8		1.1	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 1:45:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	11	U	11	MDL	35	PQL	ug/Kg	UJ	L
Aroclor 5442	11	U	11	MDL	35	PQL	ug/Kg	UJ	L
Aroclor 5460	18	J	11	MDL	35	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-140-SA5C-SB-3.0-4.0 *Collected:* 12/14/2010 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
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: 8151A **Matrix:** AQ

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 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
2,4,5-TP (Silvex)	0.0097	U	0.0097	MDL	0.049	PQL	ug/L	UJ	C
DALAPON	0.24	U	0.24	MDL	1.2	PQL	ug/L	UJ	C, C
DICHLOROPROP	0.16	U	0.16	MDL	0.49	PQL	ug/L	UJ	C
DINOSEB	0.097	U	0.097	MDL	0.49	PQL	ug/L	UJ	C

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SED-022-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
2,4,5-T	0.38		0.089	MDL	0.18	PQL	ug/Kg	J	S, *IX
DALAPON	4.8	U	4.8	MDL	9.7	PQL	ug/Kg	UJ	C, C
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L
MCPA	1800		82	MDL	270	PQL	ug/Kg	J	S, C

Sample ID: SED-023-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
DALAPON	4.9	U	4.9	MDL	10	PQL	ug/Kg	UJ	C, C
DICAMBA	0.69	J	0.45	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L
MCPA	85	U	85	MDL	280	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SED-024-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
DALAPON	5.0	U	5.0	MDL	10	PQL	ug/Kg	UJ	C, C
DICAMBA	1.0	J	0.46	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L
MCPA	87	U	87	MDL	290	PQL	ug/Kg	UJ	C

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DALAPON	5.1	U	5.1	MDL	10	PQL	ug/Kg	UJ	C, C
DICAMBA	0.57	J	0.46	MDL	1.4	PQL	ug/Kg	J	Z, S, *IX
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L
MCPA	1200		88	MDL	290	PQL	ug/Kg	J	S, C

Sample ID: SED-027-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
DALAPON	5.1	U	5.1	MDL	10	PQL	ug/Kg	UJ	C, C
DICAMBA	1.3	J	0.46	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.93	U	0.93	MDL	2.8	PQL	ug/Kg	R	L
MCPA	240	U	240	MDL	290	PQL	ug/Kg	UJ	C

Sample ID: SL-125-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
DALAPON	4.6	U	4.6	MDL	9.5	PQL	ug/Kg	UJ	C, C
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPA	80	U	80	MDL	260	PQL	ug/Kg	UJ	C

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
DALAPON	4.6	U	4.6	MDL	9.4	PQL	ug/Kg	UJ	C, C
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPA	80	U	80	MDL	260	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-128-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
DALAPON	4.7	U	4.7	MDL	9.5	PQL	ug/Kg	UJ	C, C
DICAMBA	0.42	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z, S, *IX
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L
MCPA	3200		81	MDL	270	PQL	ug/Kg	J	S, C

Sample ID: SL-129-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
DALAPON	4.6	U	4.6	MDL	9.5	PQL	ug/Kg	UJ	C, C
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPA	590		80	MDL	260	PQL	ug/Kg	J	S, C

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 12:30:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SED-026-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 3:22:00 *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	47	J	19	MDL	390	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
BENZIDINE	1200	U	1200	MDL	3600	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-140-SA5C-SB-3.0-4.0 *Collected:* 12/14/2010 2:28:00 *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	50	J	19	MDL	370	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 12:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
2-METHYLNAPHTHALENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
BENZO(K)FLUORANTHENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	0.16	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Butylbenzylphthalate	0.060	J	0.052	MDL	1.0	PQL	ug/L	U	B
CHRYSENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
DIBENZO(A,H)ANTHRACENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
Diethylphthalate	0.12	J	0.052	MDL	1.0	PQL	ug/L	J	Z, L
Dimethylphthalate	0.052	U	0.052	MDL	1.0	PQL	ug/L	UJ	L
Di-n-butylphthalate	0.15	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-octylphthalate	0.083	J	0.052	MDL	1.0	PQL	ug/L	J	Z
FLUORANTHENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
NAPHTHALENE	0.027	J	0.010	MDL	0.052	PQL	ug/L	J	Z
N-NITROSODIMETHYLAMINE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L

Method Category: SVOA

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

Sample ID: SED-022-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
1-METHYLNAPHTHALENE	1.4	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.72	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.68	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SED-022-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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(A)PYRENE	1.4	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
CHRYSENE	5.6		0.36	MDL	1.8	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	L
Diethylphthalate	6.5	U	6.5	MDL	19	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.5	U	6.5	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	16		0.72	MDL	1.8	PQL	ug/Kg	J	L
FLUORENE	0.72	U	0.72	MDL	1.8	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	1.1	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z, L

Sample ID: SED-023-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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	1.3	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	J	Z
CHRYSENE	1.4	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L
Diethylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.1	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z, L
FLUORENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.75	U	0.75	MDL	1.9	PQL	ug/Kg	UJ	L
NAPHTHALENE	1.6	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	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: SED-024-SIV-SD-0.0-0.5 *Collected:* 12/14/2010 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
BENZO(B)FLUORANTHENE	1.0	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	10	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L
Diethylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.9	U	6.9	MDL	21	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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SED-024-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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*
FLUORANTHENE	1.2	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z, L
FLUORENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.76	U	0.76	MDL	1.9	PQL	ug/Kg	UJ	L
NAPHTHALENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PHENANTHRENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
PYRENE	0.95	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: **SED-026-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 3:22:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **1**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTHRACENE	1.0	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.6	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.8	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.1	J	7.0	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	5.1		0.39	MDL	1.9	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
Diethylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	7.0	U	7.0	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	8.6		0.77	MDL	1.9	PQL	ug/Kg	J	L
FLUORENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	1.3	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, L

Sample ID: **SED-027-SIV-SD-0.0-0.5** ***Collected:*** **12/14/2010 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*
BENZO(B)FLUORANTHENE	0.94	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.9	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.85	J	0.39	MDL	1.9	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
Diethylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.94	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z, L
FLUORENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
PHENANTHRENE	1.0	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
CHRYSENE	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	UJ	L
DIBENZO(A,H)ANTHRACENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	L
Diethylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	Q, L
Di-n-butylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	L
FLUORENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 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
CHRYSENE	0.41	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
Diethylphthalate	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
FLUORENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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	7.3	J	7.2	MDL	21	PQL	ug/Kg	J	Z
CHRYSENE	0.50	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
Diethylphthalate	7.2	U	7.2	MDL	21	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	7.2	U	7.2	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
FLUORENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L

Sample ID: SL-004-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 11:18:00 *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	12	J	7.2	MDL	22	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-004-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 11:18:00 *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	0.53	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
Diethylphthalate	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	7.2	U	7.2	MDL	22	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
FLUORENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	L

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *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	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	L
DIBENZO(A,H)ANTHRACENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
Diethylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.9	U	6.9	MDL	21	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
FLUORENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.77	U	0.77	MDL	1.9	PQL	ug/Kg	UJ	L

Sample ID: SL-125-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
CHRYSENE	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	L
DIBENZO(A,H)ANTHRACENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L
Diethylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L
FLUORENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-126-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 2:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	0.82	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.73	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-126-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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	9.6	J	6.3	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.35	MDL	1.7	PQL	ug/Kg	J	Z, L
DIBENZO(A,H)ANTHRACENE	0.70	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	L
Diethylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	1.7	J	0.70	MDL	1.7	PQL	ug/Kg	J	L
FLUORENE	0.70	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.70	U	0.70	MDL	1.7	PQL	ug/Kg	UJ	L
PHENANTHRENE	0.75	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-128-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 1:35:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.86	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.41	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
Butylbenzylphthalate	10	J	6.4	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	4.9		0.35	MDL	1.8	PQL	ug/Kg	J	L
DIBENZO(A,H)ANTHRACENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	L
Diethylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	7.0	J	6.4	MDL	19	PQL	ug/Kg	J	Z, L
FLUORANTHENE	7.8		0.71	MDL	1.8	PQL	ug/Kg	J	L
FLUORENE	0.71	U	0.71	MDL	1.8	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z, L
NAPHTHALENE	0.98	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-129-SA5B-SS-0.0-0.5 ***Collected:*** 12/14/2010 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
CHRYSENE	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	L
DIBENZO(A,H)ANTHRACENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L
Diethylphthalate	6.3	U	6.3	MDL	19	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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SL-129-SA5B-SS-0.0-0.5 *Collected:* 12/14/2010 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
Di-n-butylphthalate	6.3	U	6.3	MDL	19	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L
FLUORENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.70	U	0.70	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-140-SA5C-SB-3.0-4.0 *Collected:* 12/14/2010 2:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CHRYSENE	0.37	U	0.37	MDL	1.9	PQL	ug/Kg	UJ	L
DIBENZO(A,H)ANTHRACENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	L
Diethylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
Di-n-butylphthalate	6.7	U	6.7	MDL	20	PQL	ug/Kg	UJ	L
FLUORANTHENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	L
FLUORENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	L
INDENO(1,2,3-CD)PYRENE	0.74	U	0.74	MDL	1.9	PQL	ug/Kg	UJ	L

Method Category: SVOA

Method: 8330A **Matrix: SO**

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
Tetryl	82	U	82	MDL	160	PQL	ug/Kg	UJ	C

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 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
Tetryl	92	U	92	MDL	180	PQL	ug/Kg	UJ	C

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 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
Tetryl	91	U	91	MDL	180	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: DE039 **Laboratory:** LL

EDD Filename: PrepDE039_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8330A **Matrix:** SO

Sample ID: SL-004-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 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
Tetryl	92	U	92	MDL	180	PQL	ug/Kg	UJ	C

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Tetryl	88	U	88	MDL	170	PQL	ug/Kg	UJ	C

Method Category: VOA

Method: 8015B **Matrix:** SO

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 9:42:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	130	J	110	MDL	530	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 11:11:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	410	J	120	MDL	600	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	160	J	110	MDL	570	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix:** AQ

Sample ID: EB02-SA5B-121410 *Collected:* 12/14/2010 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
ACETONE	6	U	6	MDL	20	PQL	ug/L	UJ	C
Chlorotrifluoroethylene	2	U	2	MDL	5	PQL	ug/L	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: DE039 Laboratory: LL

EDD Filename: PrepDE039_v1 eQAPP Name: CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-002-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 9:42:00 *Analysis Type:* RES *Dilution:* 0.99

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.7	U	1.7	MDL	8.5	PQL	ug/Kg	UJ	C, C
METHYLENE CHLORIDE	1.2	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.2	PQL	ug/Kg	J	Z

Sample ID: SL-002-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 9:50:00 *Analysis Type:* RES *Dilution:* 0.86

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	5.6	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, C
METHYLENE CHLORIDE	0.88	J	0.25	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	MDL	4.1	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5C-SB-4.0-5.0 *Collected:* 12/14/2010 11:11:00 *Analysis Type:* RES *Dilution:* 0.92

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-HEXANONE	1.8	U	1.8	MDL	8.8	PQL	ug/Kg	UJ	C, C
METHYLENE CHLORIDE	0.97	J	0.26	MDL	4.4	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.09	MDL	4.4	PQL	ug/Kg	J	Z

Sample ID: SL-004-SA5C-SB-9.0-10.0 *Collected:* 12/14/2010 11:18:00 *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)	3.4	J	1.2	MDL	7.7	PQL	ug/Kg	J	Z
2-HEXANONE	1.5	U	1.5	MDL	7.7	PQL	ug/Kg	UJ	C, C
METHYLENE CHLORIDE	1.1	J	0.23	MDL	3.9	PQL	ug/Kg	U	B
TOLUENE	0.08	J	0.08	MDL	3.9	PQL	ug/Kg	J	Z

Sample ID: SL-060-SA5C-SB-10.0-11.0 *Collected:* 12/14/2010 4:18:00 *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	7.9	PQL	ug/Kg	UJ	C, C
METHYLENE CHLORIDE	3.3	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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **VOA**

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

Sample ID: **SL-140-SA5C-SB-3.0-4.0** ***Collected:*** **12/14/2010 2:28:00** ***Analysis Type:*** **RES** ***Dilution:*** **0.94**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
2-HEXANONE	1.7	U	1.7	MDL	8.4	PQL	ug/Kg	UJ	C, C
METHYLENE CHLORIDE	2.8	J	0.25	MDL	4.2	PQL	ug/Kg	U	B
TOLUENE	0.09	J	0.08	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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_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

Data Qualifier Summary

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_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: DE039 **Laboratory: LL**

EDD Filename: PrepDE039_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

DE039

Method Blank Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_v1. eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35548CB221648	12/23/2010 4:48:00 PM	MAGNESIUM	0.0421 mg/L	EB02-SA5B-121410
P35548CB222358	12/22/2010 11:58:00 PM	CALCIUM	0.0960 mg/L	EB02-SA5B-121410

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35108IB221836	12/22/2010 6:36:00 PM	PHOSPHORUS POTASSIUM TIN	1.51 mg/Kg 31.3 mg/Kg 1.41 mg/Kg	SED-022-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-004-SA5C-SB-9.0-10.0 SL-060-SA5C-SB-10.0-11.0 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-140-SA5C-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
SED-022-SIV-SD-0.0-0.5(RES)	TIN	2.34 mg/Kg	2.34U mg/Kg
SED-023-SIV-SD-0.0-0.5(RES)	TIN	2.38 mg/Kg	2.38U mg/Kg
SED-024-SIV-SD-0.0-0.5(RES)	TIN	2.66 mg/Kg	2.66U mg/Kg
SED-026-SIV-SD-0.0-0.5(RES)	TIN	2.97 mg/Kg	2.97U mg/Kg
SED-027-SIV-SD-0.0-0.5(RES)	TIN	2.57 mg/Kg	2.57U mg/Kg
SL-002-SA5C-SB-4.0-5.0(RES)	TIN	2.76 mg/Kg	2.76U mg/Kg
SL-002-SA5C-SB-9.0-10.0(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg
SL-004-SA5C-SB-4.0-5.0(RES)	TIN	2.90 mg/Kg	2.90U mg/Kg
SL-004-SA5C-SB-9.0-10.0(RES)	TIN	2.81 mg/Kg	2.81U mg/Kg
SL-060-SA5C-SB-10.0-11.0(RES)	TIN	2.92 mg/Kg	2.92U mg/Kg
SL-125-SA5B-SS-0.0-0.5(RES)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-126-SA5B-SS-0.0-0.5(RES)	TIN	2.93 mg/Kg	2.93U mg/Kg
SL-128-SA5B-SS-0.0-0.5(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SL-129-SA5B-SS-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SL-140-SA5C-SB-3.0-4.0(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_v1. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35126DB221153A	12/26/2010 11:53:00 AM	CADMIUM COPPER LEAD THALLIUM VANADIUM	0.0774 mg/Kg 0.0704 mg/Kg 0.0185 mg/Kg 0.0412 mg/Kg 0.0507 mg/Kg	SED-022-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-004-SA5C-SB-9.0-10.0 SL-060-SA5C-SB-10.0-11.0 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-140-SA5C-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
SED-022-SIV-SD-0.0-0.5(RES)	CADMIUM	0.358 mg/Kg	0.358U mg/Kg
SED-023-SIV-SD-0.0-0.5(RES)	CADMIUM	0.216 mg/Kg	0.216U mg/Kg
SED-024-SIV-SD-0.0-0.5(RES)	CADMIUM	0.251 mg/Kg	0.251U mg/Kg
SED-026-SIV-SD-0.0-0.5(REA)	CADMIUM	0.260 mg/Kg	0.260U mg/Kg
SED-027-SIV-SD-0.0-0.5(RES)	CADMIUM	0.259 mg/Kg	0.259U mg/Kg
SL-002-SA5C-SB-4.0-5.0(RES)	CADMIUM	0.0891 mg/Kg	0.0891U mg/Kg
SL-004-SA5C-SB-4.0-5.0(RES)	CADMIUM	0.237 mg/Kg	0.237U mg/Kg
SL-060-SA5C-SB-10.0-11.0(RES)	CADMIUM	0.220 mg/Kg	0.220U mg/Kg
SL-126-SA5B-SS-0.0-0.5(RES)	CADMIUM	0.387 mg/Kg	0.387U mg/Kg
SL-128-SA5B-SS-0.0-0.5(REA)	CADMIUM	0.307 mg/Kg	0.307U mg/Kg
SL-140-SA5C-SB-3.0-4.0(RES)	CADMIUM	0.0533 mg/Kg	0.0533U mg/Kg

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB18B211848A	12/16/2010 6:48:00 PM	CHLOROFORM METHYLENE CHLORIDE	0.37 ug/Kg 1.0 ug/Kg	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-004-SA5C-SB-9.0-10.0 SL-060-SA5C-SB-10.0-11.0 SL-140-SA5C-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-002-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	1.2 ug/Kg	4.2U ug/Kg
SL-002-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	0.88 ug/Kg	4.1U ug/Kg
SL-004-SA5C-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.97 ug/Kg	4.4U ug/Kg
SL-004-SA5C-SB-9.0-10.0(RES)	METHYLENE CHLORIDE	1.1 ug/Kg	3.9U ug/Kg
SL-060-SA5C-SB-10.0-11.0(RES)	METHYLENE CHLORIDE	3.3 ug/Kg	4.0U ug/Kg
SL-140-SA5C-SB-3.0-4.0(RES)	METHYLENE CHLORIDE	2.8 ug/Kg	4.2U ug/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_v1. eQAPP Name: CDM_SSFL_110509

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWH35B261352	1/4/2011 1:52:00 PM	Butylbenzylphthalate	0.055 ug/L	EB02-SA5B-121410

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

Sample ID	Analyte	Reported Result	Modified Final Result
EB02-SA5B-121410(RES)	Butylbenzylphthalate	0.060 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_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-129-SA5B-SS-0.0-0.5MS (SED-026-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0 SL-128-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5)	FLUORIDE	65	-	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-002-SA5C-SB-4.0-5.0MSD (SL-002-SA5C-SB-4.0-5.0)	DIETHYLENE GLYCOL	-	-	59.00-109.00	36 (20.00)	DIETHYLENE GLYCOL	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-002-SA5C-SB-4.0-5.0MS	ARSENIC	292	228	75.00-125.00	-	ARSENIC	
SL-002-SA5C-SB-4.0-5.0MSD	BERYLLIUM	197	149	75.00-125.00	-	BERYLLIUM	
(SED-022-SIV-SD-0.0-0.5	CADMIUM	169	171	75.00-125.00	-	CADMIUM	
SED-023-SIV-SD-0.0-0.5	CHROMIUM	211	194	75.00-125.00	-	CHROMIUM	
SED-024-SIV-SD-0.0-0.5	COBALT	149	143	75.00-125.00	-	COBALT	
SED-026-SIV-SD-0.0-0.5	COPPER	159	157	75.00-125.00	-	COPPER	
SED-027-SIV-SD-0.0-0.5	LEAD	257	229	75.00-125.00	-	LEAD	
SL-002-SA5C-SB-4.0-5.0	NICKEL	172	164	75.00-125.00	-	NICKEL	
SL-002-SA5C-SB-9.0-10.0	SILVER	173	163	75.00-125.00	-	SILVER	J(all detects)
SL-004-SA5C-SB-4.0-5.0	THALLIUM	224	203	75.00-125.00	-	THALLIUM	
SL-004-SA5C-SB-9.0-10.0	VANADIUM	264	249	75.00-125.00	-	VANADIUM	Zn No Qual,
SL-060-SA5C-SB-10.0-11.0	ZINC	365	304	75.00-125.00	-	ZINC	>4x
SL-125-SA5B-SS-0.0-0.5							
SL-126-SA5B-SS-0.0-0.5							
SL-128-SA5B-SS-0.0-0.5							
SL-129-SA5B-SS-0.0-0.5							
SL-140-SA5C-SB-3.0-4.0)							
SL-002-SA5C-SB-4.0-5.0MS	MOLYBDENUM	175	165	75.00-125.00	-	MOLYBDENUM	
SL-002-SA5C-SB-4.0-5.0MSD							
(SED-022-SIV-SD-0.0-0.5							
SED-023-SIV-SD-0.0-0.5							
SED-024-SIV-SD-0.0-0.5							
SED-026-SIV-SD-0.0-0.5							
SED-027-SIV-SD-0.0-0.5							
SL-002-SA5C-SB-4.0-5.0							
SL-002-SA5C-SB-9.0-10.0							J(all detects)
SL-004-SA5C-SB-4.0-5.0							
SL-004-SA5C-SB-9.0-10.0							
SL-060-SA5C-SB-10.0-11.0							
SL-125-SA5B-SS-0.0-0.5							
SL-126-SA5B-SS-0.0-0.5							
SL-128-SA5B-SS-0.0-0.5							
SL-129-SA5B-SS-0.0-0.5							
SL-140-SA5C-SB-3.0-4.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_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-002-SA5C-SB-4.0-5.0MS **SL-002-SA5C-SB-4.0-5.0MSD** (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -002-SA5C-SB-4.0-5.0 SL -002-SA5C-SB-9.0-10.0 SL -004-SA5C-SB-4.0-5.0 SL -004-SA5C-SB-9.0-10.0 SL -060-SA5C-SB-10.0-11.0 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5 SL -140-SA5C-SB-3.0-4.0)	BARIUM	472	400	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-002-SA5C-SB-4.0-5.0MS	ALUMINUM	1340	771	75.00-125.00	-	ALUMINUM	
SL-002-SA5C-SB-4.0-5.0MSD	CALCIUM	190	-	75.00-125.00	-	CALCIUM	
(SED-022-SIV-SD-0.0-0.5	MAGNESIUM	358	250	75.00-125.00	-	MAGNESIUM	
SED -023-SIV-SD-0.0-0.5	POTASSIUM	139	-	75.00-125.00	-	POTASSIUM	
SED -024-SIV-SD-0.0-0.5	TITANIUM	221	131	75.00-125.00	-	TITANIUM	
SED -026-SIV-SD-0.0-0.5							
SED -027-SIV-SD-0.0-0.5							
SL -002-SA5C-SB-4.0-5.0							
SL -002-SA5C-SB-9.0-10.0							J(all detects)
SL -004-SA5C-SB-4.0-5.0							
SL -004-SA5C-SB-9.0-10.0							Al, Ca, Mg, Ti
SL -060-SA5C-SB-10.0-11.0							No Qual, >4x
SL -125-SA5B-SS-0.0-0.5							
SL -126-SA5B-SS-0.0-0.5							
SL -128-SA5B-SS-0.0-0.5							
SL -129-SA5B-SS-0.0-0.5							
SL -140-SA5C-SB-3.0-4.0)							
SL-002-SA5C-SB-4.0-5.0MS	IRON	670	-620	75.00-125.00	-	IRON	
SL-002-SA5C-SB-4.0-5.0MSD							
(SED-022-SIV-SD-0.0-0.5							
SED -023-SIV-SD-0.0-0.5							
SED -024-SIV-SD-0.0-0.5							
SED -026-SIV-SD-0.0-0.5							
SED -027-SIV-SD-0.0-0.5							
SL -002-SA5C-SB-4.0-5.0							
SL -002-SA5C-SB-9.0-10.0							No Qual, >4x
SL -004-SA5C-SB-4.0-5.0							
SL -004-SA5C-SB-9.0-10.0							
SL -060-SA5C-SB-10.0-11.0							
SL -125-SA5B-SS-0.0-0.5							
SL -126-SA5B-SS-0.0-0.5							
SL -128-SA5B-SS-0.0-0.5							
SL -129-SA5B-SS-0.0-0.5							
SL -140-SA5C-SB-3.0-4.0)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_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-002-SA5C-SB-4.0-5.0MSD (SED-022-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-004-SA5C-SB-9.0-10.0 SL-060-SA5C-SB-10.0-11.0 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-140-SA5C-SB-3.0-4.0)	MANGANESE PHOSPHORUS	- -	55 66	75.00-125.00 75.00-125.00	- -	MANGANESE PHOSPHORUS	J(all detects) UJ(all non-detects) Mn 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-002-SA5C-SB-4.0-5.0MS SL-002-SA5C-SB-4.0-5.0MSD (SL-002-SA5C-SB-4.0-5.0)	BENZIDINE	27	-	35.00-141.00	37 (30.00)	BENZIDINE	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-002-SA5C-SB-4.0-5.0MS SL-002-SA5C-SB-4.0-5.0MSD (SL-002-SA5C-SB-4.0-5.0)	Diethylphthalate	70	72	87.00-131.00	-	Diethylphthalate	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_v1. eQAPP Name: CDM_SSFL_110509

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-129-SA5B-SS-0.0-0.5DUP (SED-026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -060-SA5C-SB-10.0-11.0 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5)	FLUORIDE Nitrate-NO3	24 200	20.00 20.00	No Qual OK by difference
SL-002-SA5C-SB-4.0-5.0DUP (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SL -002-SA5C-SB-4.0-5.0 SL -002-SA5C-SB-9.0-10.0 SL -004-SA5C-SB-4.0-5.0 SL -004-SA5C-SB-9.0-10.0 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -140-SA5C-SB-3.0-4.0)	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-002-SA5C-SB-4.0-5.0DUP (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -002-SA5C-SB-4.0-5.0 SL -002-SA5C-SB-9.0-10.0 SL -004-SA5C-SB-4.0-5.0 SL -004-SA5C-SB-9.0-10.0 SL -060-SA5C-SB-10.0-11.0 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5 SL -140-SA5C-SB-3.0-4.0)	BORON Zirconium	39 200	20.00 20.00	No Qual OK by difference

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

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_v1. eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-002-SA5C-SB-4.0-5.0DUP	ARSENIC	29	20.00	
(SED-022-SIV-SD-0.0-0.5	BARIUM	33	20.00	
SED -023-SIV-SD-0.0-0.5	CHROMIUM	28	20.00	
SED -024-SIV-SD-0.0-0.5	COPPER	27	20.00	
SED -026-SIV-SD-0.0-0.5	LEAD	28	20.00	
SED -027-SIV-SD-0.0-0.5	MOLYBDENUM	32	20.00	
SL -002-SA5C-SB-4.0-5.0	NICKEL	26	20.00	
SL -002-SA5C-SB-9.0-10.0	SELENIUM	24	20.00	J(all detects)
SL -004-SA5C-SB-4.0-5.0	SILVER	30	20.00	UJ(all non-detects)
SL -004-SA5C-SB-9.0-10.0	VANADIUM	27	20.00	
SL -060-SA5C-SB-10.0-11.0	ZINC	30	20.00	Mo, Se, Ag
SL -125-SA5B-SS-0.0-0.5				No Qual
SL -126-SA5B-SS-0.0-0.5				OK by difference
SL -128-SA5B-SS-0.0-0.5				
SL -129-SA5B-SS-0.0-0.5				
SL -140-SA5C-SB-3.0-4.0)				

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-002-SA5C-SB-4.0-5.0DUP	HEXAVALENT CHROMIUM	30	20.00	
(SED-022-SIV-SD-0.0-0.5				
SED -023-SIV-SD-0.0-0.5				
SED -024-SIV-SD-0.0-0.5				
SED -026-SIV-SD-0.0-0.5				
SED -027-SIV-SD-0.0-0.5				
SL -002-SA5C-SB-4.0-5.0				
SL -002-SA5C-SB-9.0-10.0				No Qual
SL -004-SA5C-SB-4.0-5.0				OK by difference
SL -004-SA5C-SB-9.0-10.0				
SL -060-SA5C-SB-10.0-11.0				
SL -125-SA5B-SS-0.0-0.5				
SL -126-SA5B-SS-0.0-0.5				
SL -128-SA5B-SS-0.0-0.5				
SL -129-SA5B-SS-0.0-0.5				
SL -140-SA5C-SB-3.0-4.0)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_v1. eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03506AY241102A (EB02-SA5B-121410)	4,4'-DDE	-	137	66.00-130.00	-	4,4'-DDE	J (all detects)

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03507AQ240905A P03507AY240846A (EB02-SA5B-121410)	Aroclor 5442	58	56	75.00-125.00	-	Aroclor 5432, 5442, 5460	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
P0WBLCSY262212 (EB02-SA5B-121410)	1,2-Diphenylhydrazine/Azobenzen	-	118	78.00-116.00	-	1,2-Diphenylhydrazine/Azobenz	J(all detects)
	2,4,5-TRICHLOROPHENOL	-	108	79.00-107.00	-	2,4,5-TRICHLOROPHENOL	
	2,4-DICHLOROPHENOL	-	117	80.00-109.00	-	2,4-DICHLOROPHENOL	
	2,4-DIMETHYLPHENOL	-	117	72.00-110.00	-	2,4-DIMETHYLPHENOL	
	2-CHLOROPHENOL	-	109	77.00-108.00	-	2-CHLOROPHENOL	
	2-METHYLPHENOL	-	102	64.00-101.00	-	2-METHYLPHENOL	
	DIBENZOFURAN	-	111	83.00-108.00	-	DIBENZOFURAN	
P0WBLCSY262212 (EB02-SA5B-121410)	BENZOIC ACID	-	-	10.00-69.00	44 (30.00)	BENZOIC ACID	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
P0WHLCSQ261426 P0WHLCSY261500 (EB02-SA5B-121410)	1-METHYLNAPHTHALENE	-	69	71.00-117.00	-	1-METHYLNAPHTHALENE	J(all detects) UJ(all non-detects)
	2-METHYLNAPHTHALENE	71	66	75.00-115.00	-	2-METHYLNAPHTHALENE	
	BENZO(K)FLUORANTHENE	-	71	72.00-122.00	-	BENZO(K)FLUORANTHENE	
	CHRYSENE	75	-	76.00-116.00	-	CHRYSENE	
	DIBENZO(A,H)ANTHRACENE	-	69	71.00-125.00	-	DIBENZO(A,H)ANTHRACENE	
	Diethylphthalate	67	65	70.00-130.00	-	Diethylphthalate	
	Dimethylphthalate	67	-	70.00-130.00	-	Dimethylphthalate	
	FLUORANTHENE	-	67	75.00-116.00	-	FLUORANTHENE	
	N-NITROSODIMETHYLAMINE	59	58	70.00-130.00	-	N-NITROSODIMETHYLAMINE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE039 Laboratory: LL

EDD Filename: DE039_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
P03510AQ321635A (SL-002-SA5C-SB-4.0-5.0 SL -002-SA5C-SB-9.0-10.0 SL -004-SA5C-SB-4.0-5.0 SL -004-SA5C-SB-9.0-10.0 SL -060-SA5C-SB-10.0-11.0)	Propylene glycol	72	-	75.00-125.00	-	Propylene glycol	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03519AQ241754A (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5)	METHOXYCHLOR	131	-	59.00-125.00	-	METHOXYCHLOR	J(all detects)

Method: 8082
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03549AQ241013A P03549AY240955A (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -002-SA5C-SB-4.0-5.0 SL -002-SA5C-SB-9.0-10.0 SL -004-SA5C-SB-4.0-5.0 SL -004-SA5C-SB-9.0-10.0 SL -060-SA5C-SB-10.0-11.0 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5 SL -140-SA5C-SB-3.0-4.0)	Aroclor 5442	58	55	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: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03575AQ241324A (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5)	2,4-D	144	-	40.00-140.00	-	2,4-D	J(all detects)
P03575AQ241324A (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4LILCSQ261317 (SED-022-SIV-SD-0.0-0.5 SED -023-SIV-SD-0.0-0.5 SED -024-SIV-SD-0.0-0.5 SED -026-SIV-SD-0.0-0.5 SED -027-SIV-SD-0.0-0.5 SL -002-SA5C-SB-4.0-5.0 SL -002-SA5C-SB-9.0-10.0 SL -004-SA5C-SB-4.0-5.0 SL -004-SA5C-SB-9.0-10.0 SL -060-SA5C-SB-10.0-11.0 SL -125-SA5B-SS-0.0-0.5 SL -126-SA5B-SS-0.0-0.5 SL -128-SA5B-SS-0.0-0.5 SL -129-SA5B-SS-0.0-0.5 SL -140-SA5C-SB-3.0-4.0)	CHRYSENE	77	-	79.00-120.00	-	CHRYSENE	J(all detects) UJ(all non-detects)
	DIBENZO(A,H)ANTHRACENE	61	-	62.00-142.00	-	DIBENZO(A,H)ANTHRACENE	
	Diethylphthalate	63	-	68.00-125.00	-	Diethylphthalate	
	Di-n-butylphthalate	81	-	84.00-132.00	-	Di-n-butylphthalate	
	FLUORANTHENE	76	-	78.00-120.00	-	FLUORANTHENE	
	FLUORENE	69	-	71.00-120.00	-	FLUORENE	
	INDENO(1,2,3-CD)PYRENE	61	-	62.00-141.00	-	INDENO(1,2,3-CD)PYRENE	

Surrogate Outlier Report

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-022-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	No Qual Diluted Out
SED-024-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	19	20.00-120.00	All Target Analytes	No Qual Diluted Out

Method: **8082**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-023-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	132	45.00-120.00	All Target Analytes	J(all detects)
SED-024-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	142	45.00-120.00	All Target Analytes	J(all detects)
SED-026-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	185 195	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SED-027-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	155	45.00-120.00	All Target Analytes	J(all detects)
SL-002-SA5C-SB-4.0-5.0	DECACHLOROBIPHENYL	121	45.00-120.00	All Target Analytes	J(all detects)
SL-060-SA5C-SB-10.0-11.0	DECACHLOROBIPHENYL	151	45.00-120.00	All Target Analytes	J(all detects)
SL-125-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	127	45.00-120.00	All Target Analytes	J(all detects)
SL-126-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	151	45.00-120.00	All Target Analytes	J(all detects)
SL-129-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	No Qual Diluted Out

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

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-022-SIV-SD-0.0-0.5	2,4-Dichlorophenylacetic acid	231	36.00-156.00	All Target Analytes	J(all detects)
SED-026-SIV-SD-0.0-0.5	2,4-Dichlorophenylacetic acid	377	36.00-156.00	All Target Analytes	J(all detects)
SL-125-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	178	36.00-156.00	All Target Analytes	J(all detects)
SL-126-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	157	36.00-156.00	All Target Analytes	J(all detects)
SL-128-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	162	36.00-156.00	All Target Analytes	J(all detects)
SL-129-SA5B-SS-0.0-0.5	2,4-Dichlorophenylacetic acid	193	36.00-156.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA5B-121410	IRON	J	0.0533	0.200	PQL	mg/L	J (all detects)

Method: 6020

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA5B-121410	LEAD	J	0.000075	0.0010	PQL	mg/L	J (all detects)
	MOLYBDENUM	J	0.00032	0.00050	PQL	mg/L	

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB02-SA5B-121410	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.16	1.0	PQL	ug/L	J (all detects)
	Butylbenzylphthalate	J	0.060	1.0	PQL	ug/L	
	Diethylphthalate	J	0.12	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.15	1.0	PQL	ug/L	
	Di-n-octylphthalate	J	0.083	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.027	0.052	PQL	ug/L	

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-027-SIV-SD-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-002-SA5C-SB-9.0-10.0	Nitrate-NO3	J	1.1	1.8	PQL	mg/Kg	J (all detects)
SL-004-SA5C-SB-4.0-5.0	Nitrate-NO3	J	1.6	1.8	PQL	mg/Kg	J (all detects)
SL-060-SA5C-SB-10.0-11.0	FLUORIDE	J	0.95	1.1	PQL	mg/Kg	J (all detects)
	Nitrate-NO3	J	1.3	1.7	PQL	mg/Kg	

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-022-SIV-SD-0.0-0.5	BORON	J	4.54	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	79.9	106	PQL	mg/Kg	
	TIN	J	2.34	10.6	PQL	mg/Kg	
	Zirconium	J	0.900	5.31	PQL	mg/Kg	
SED-023-SIV-SD-0.0-0.5	BORON	J	4.10	5.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	67.3	109	PQL	mg/Kg	
	TIN	J	2.38	10.9	PQL	mg/Kg	
	Zirconium	J	1.16	5.44	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-024-SIV-SD-0.0-0.5	BORON	J	3.73	5.62	PQL	mg/Kg	J (all detects)
	SODIUM	J	68.9	112	PQL	mg/Kg	
	TIN	J	2.66	11.2	PQL	mg/Kg	
	Zirconium	J	1.51	5.62	PQL	mg/Kg	
SED-026-SIV-SD-0.0-0.5	BORON	J	4.12	5.74	PQL	mg/Kg	J (all detects)
	SODIUM	J	112	115	PQL	mg/Kg	
	TIN	J	2.97	11.5	PQL	mg/Kg	
SED-027-SIV-SD-0.0-0.5	BORON	J	4.15	5.79	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.1	116	PQL	mg/Kg	
	TIN	J	2.57	11.6	PQL	mg/Kg	
	Zirconium	J	1.31	5.79	PQL	mg/Kg	
SL-002-SA5C-SB-4.0-5.0	BORON	J	2.97	5.28	PQL	mg/Kg	J (all detects)
	SODIUM	J	95.4	106	PQL	mg/Kg	
	TIN	J	2.76	10.6	PQL	mg/Kg	
SL-002-SA5C-SB-9.0-10.0	BORON	J	5.03	5.77	PQL	mg/Kg	J (all detects)
	TIN	J	3.01	11.5	PQL	mg/Kg	
	Zirconium	J	5.23	5.77	PQL	mg/Kg	
SL-004-SA5C-SB-4.0-5.0	BORON	J	4.55	5.74	PQL	mg/Kg	J (all detects)
	TIN	J	2.90	11.5	PQL	mg/Kg	
	Zirconium	J	3.75	5.74	PQL	mg/Kg	
SL-004-SA5C-SB-9.0-10.0	TIN	J	2.81	11.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.89	5.95	PQL	mg/Kg	
SL-060-SA5C-SB-10.0-11.0	BORON	J	0.988	5.52	PQL	mg/Kg	J (all detects)
	TIN	J	2.92	11.0	PQL	mg/Kg	
SL-125-SA5B-SS-0.0-0.5	BORON	J	2.74	5.18	PQL	mg/Kg	J (all detects)
	SODIUM	J	89.2	104	PQL	mg/Kg	
	TIN	J	2.99	10.4	PQL	mg/Kg	
	Zirconium	J	1.36	5.18	PQL	mg/Kg	
SL-126-SA5B-SS-0.0-0.5	BORON	J	2.45	5.19	PQL	mg/Kg	J (all detects)
	SODIUM	J	100	104	PQL	mg/Kg	
	TIN	J	2.93	10.4	PQL	mg/Kg	
	Zirconium	J	4.40	5.19	PQL	mg/Kg	
SL-128-SA5B-SS-0.0-0.5	BORON	J	2.87	5.10	PQL	mg/Kg	J (all detects)
	SODIUM	J	78.0	102	PQL	mg/Kg	
	TIN	J	3.05	10.2	PQL	mg/Kg	
	Zirconium	J	1.38	5.10	PQL	mg/Kg	
SL-129-SA5B-SS-0.0-0.5	BORON	J	2.49	5.08	PQL	mg/Kg	J (all detects)
	SODIUM	J	84.5	102	PQL	mg/Kg	
	TIN	J	2.55	10.2	PQL	mg/Kg	
	Zirconium	J	1.62	5.08	PQL	mg/Kg	
SL-140-SA5C-SB-3.0-4.0	BORON	J	2.76	5.35	PQL	mg/Kg	J (all detects)
	TIN	J	2.61	10.7	PQL	mg/Kg	
	Zirconium	J	2.03	5.35	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-022-SIV-SD-0.0-0.5	SELENIUM	J	0.184	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0842	0.106	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-023-SIV-SD-0.0-0.5	SELENIUM	J	0.313	0.444	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0467	0.111	PQL	mg/Kg	
SED-024-SIV-SD-0.0-0.5	ANTIMONY	J	0.194	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.206	0.445	PQL	mg/Kg	
	SILVER	J	0.0600	0.111	PQL	mg/Kg	
SED-026-SIV-SD-0.0-0.5	ANTIMONY	J	0.128	0.230	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.177	0.459	PQL	mg/Kg	
SED-027-SIV-SD-0.0-0.5	ANTIMONY	J	0.164	0.227	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.225	0.454	PQL	mg/Kg	
SL-002-SA5C-SB-4.0-5.0	ANTIMONY	J	0.160	0.211	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0891	0.106	PQL	mg/Kg	
	SELENIUM	J	0.101	0.422	PQL	mg/Kg	
	SILVER	J	0.0148	0.106	PQL	mg/Kg	
SL-002-SA5C-SB-9.0-10.0	SELENIUM	J	0.186	0.471	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0442	0.118	PQL	mg/Kg	
SL-004-SA5C-SB-4.0-5.0	SELENIUM	J	0.0746	0.473	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0893	0.118	PQL	mg/Kg	
SL-004-SA5C-SB-9.0-10.0	SELENIUM	J	0.252	0.467	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0645	0.117	PQL	mg/Kg	
SL-060-SA5C-SB-10.0-11.0	SELENIUM	J	0.268	0.442	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0336	0.110	PQL	mg/Kg	
SL-125-SA5B-SS-0.0-0.5	SELENIUM	J	0.210	0.414	PQL	mg/Kg	J (all detects)
SL-126-SA5B-SS-0.0-0.5	SELENIUM	J	0.169	0.416	PQL	mg/Kg	J (all detects)
SL-128-SA5B-SS-0.0-0.5	SELENIUM	J	0.225	0.420	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0991	0.105	PQL	mg/Kg	
SL-129-SA5B-SS-0.0-0.5	SELENIUM	J	0.242	0.418	PQL	mg/Kg	J (all detects)
SL-140-SA5C-SB-3.0-4.0	ANTIMONY	J	0.169	0.220	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0533	0.110	PQL	mg/Kg	
	SELENIUM	J	0.0532	0.441	PQL	mg/Kg	
	SILVER	J	0.0480	0.110	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5C-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-002-SA5C-SB-9.0-10.0	HEXAVALENT CHROMIUM	J	0.51	1.2	PQL	mg/Kg	J (all detects)
SL-126-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.42	1.0	PQL	mg/Kg	J (all detects)
SL-129-SA5B-SS-0.0-0.5	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
SED-022-SIV-SD-0.0-0.5	MERCURY	J	0.0220	0.102	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-023-SIV-SD-0.0-0.5	MERCURY	J	0.0082	0.109	PQL	mg/Kg	J (all detects)
SED-024-SIV-SD-0.0-0.5	MERCURY	J	0.0121	0.114	PQL	mg/Kg	J (all detects)
SED-027-SIV-SD-0.0-0.5	MERCURY	J	0.0513	0.111	PQL	mg/Kg	J (all detects)
SL-002-SA5C-SB-9.0-10.0	MERCURY	J	0.0046	0.119	PQL	mg/Kg	J (all detects)
SL-004-SA5C-SB-4.0-5.0	MERCURY	J	0.0138	0.115	PQL	mg/Kg	J (all detects)
SL-004-SA5C-SB-9.0-10.0	MERCURY	J	0.0068	0.120	PQL	mg/Kg	J (all detects)
SL-125-SA5B-SS-0.0-0.5	MERCURY	J	0.0113	0.103	PQL	mg/Kg	J (all detects)
SL-126-SA5B-SS-0.0-0.5	MERCURY	J	0.0113	0.104	PQL	mg/Kg	J (all detects)
SL-128-SA5B-SS-0.0-0.5	MERCURY	J	0.0117	0.105	PQL	mg/Kg	J (all detects)
SL-129-SA5B-SS-0.0-0.5	MERCURY	J	0.0101	0.103	PQL	mg/Kg	J (all detects)
SL-140-SA5C-SB-3.0-4.0	MERCURY	J	0.0063	0.111	PQL	mg/Kg	J (all detects)

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5C-SB-4.0-5.0	METHANOL	J	130	530	PQL	ug/Kg	J (all detects)
SL-004-SA5C-SB-4.0-5.0	METHANOL	J	410	600	PQL	ug/Kg	J (all detects)
SL-060-SA5C-SB-10.0-11.0	METHANOL	J	160	570	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5C-SB-4.0-5.0	EFH (C21-C30) EFH (C30-C40)	J J	0.59 0.74	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-002-SA5C-SB-9.0-10.0	EFH (C21-C30)	J	0.96	1.4	PQL	mg/Kg	J (all detects)
SL-004-SA5C-SB-4.0-5.0	EFH (C30-C40)	J	1.1	1.4	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-022-SIV-SD-0.0-0.5	4,4'-DDE 4,4'-DDT ENDRIN ALDEHYDE	J J J	0.96 1.6 1.8	3.7 3.7 3.7	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SED-023-SIV-SD-0.0-0.5	DELTA-BHC HEPTACHLOR	J J	0.26 0.56	0.93 0.93	PQL PQL	ug/Kg ug/Kg	J (all detects)
SED-024-SIV-SD-0.0-0.5	DELTA-BHC HEPTACHLOR	J J	0.93 0.39	0.95 0.95	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-026-SIV-SD-0.0-0.5	ALPHA-BHC	J	0.066	0.19	PQL	ug/Kg	J (all detects)
SL-126-SA5B-SS-0.0-0.5	BETA-BHC	J	0.12	0.17	PQL	ug/Kg	J (all detects)
	DELTA-BHC	J	0.042	0.17	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.065	0.17	PQL	ug/Kg	
SL-129-SA5B-SS-0.0-0.5	4,4'-DDD	J	0.99	3.6	PQL	ug/Kg	J (all detects)
	BETA-BHC	J	0.065	0.18	PQL	ug/Kg	
	DELTA-BHC	J	0.093	0.18	PQL	ug/Kg	
	DIELDRIN	J	1.0	3.6	PQL	ug/Kg	
	ENDOSULFAN SULFATE	J	1.8	3.6	PQL	ug/Kg	
	ENDRIN ALDEHYDE	J	0.86	3.6	PQL	ug/Kg	
	gamma-BHC (Lindane)	J	0.058	0.18	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-023-SIV-SD-0.0-0.5	AROCLOR 1254	J	1.4	1.9	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	0.70	1.9	PQL	ug/Kg	
SED-024-SIV-SD-0.0-0.5	AROCLOR 1260	J	1.5	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	3.1	3.8	PQL	ug/Kg	
SED-027-SIV-SD-0.0-0.5	Aroclor 5460	J	3.6	7.6	PQL	ug/Kg	J (all detects)
SL-004-SA5C-SB-9.0-10.0	AROCLOR 1254	J	0.66	2.0	PQL	ug/Kg	J (all detects)
SL-060-SA5C-SB-10.0-11.0	AROCLOR 1254	J	1.2	2.0	PQL	ug/Kg	J (all detects)
SL-126-SA5B-SS-0.0-0.5	AROCLOR 1260	J	0.50	1.8	PQL	ug/Kg	J (all detects)
SL-129-SA5B-SS-0.0-0.5	Aroclor 5460	J	18	35	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-023-SIV-SD-0.0-0.5	DICAMBA	J	0.69	1.3	PQL	ug/Kg	J (all detects)
SED-024-SIV-SD-0.0-0.5	DICAMBA	J	1.0	1.4	PQL	ug/Kg	J (all detects)
SED-026-SIV-SD-0.0-0.5	DICAMBA	J	0.57	1.4	PQL	ug/Kg	J (all detects)
SED-027-SIV-SD-0.0-0.5	DICAMBA	J	1.3	1.4	PQL	ug/Kg	J (all detects)
SL-128-SA5B-SS-0.0-0.5	DICAMBA	J	0.42	1.3	PQL	ug/Kg	J (all detects)

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	1.2	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.2	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-002-SA5C-SB-9.0-10.0	2-BUTANONE (MEK)	J	5.6	8.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.88	4.1	PQL	ug/Kg	
	TOLUENE	J	0.09	4.1	PQL	ug/Kg	
SL-004-SA5C-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.97	4.4	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.4	PQL	ug/Kg	
SL-004-SA5C-SB-9.0-10.0	2-BUTANONE (MEK)	J	3.4	7.7	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	1.1	3.9	PQL	ug/Kg	
	TOLUENE	J	0.08	3.9	PQL	ug/Kg	
SL-060-SA5C-SB-10.0-11.0	METHYLENE CHLORIDE	J	3.3	4.0	PQL	ug/Kg	J (all detects)
SL-140-SA5C-SB-3.0-4.0	METHYLENE CHLORIDE	J	2.8	4.2	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.09	4.2	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-026-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	47	390	PQL	ug/Kg	J (all detects)
SL-140-SA5C-SB-3.0-4.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	50	370	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-022-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.72	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.68	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
SED-023-SIV-SD-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.4	20	PQL	ug/Kg	
	CHRYSENE	J	1.4	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.6	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	1.9	PQL	ug/Kg	
	PYRENE	J	1.1	1.9	PQL	ug/Kg	
SED-024-SIV-SD-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	10	21	PQL	ug/Kg	
	CHRYSENE	J	1.1	1.9	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.9	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.5	1.9	PQL	ug/Kg	
	PYRENE	J	0.95	1.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE039 **Laboratory: LL**

EDD Filename: DE039_v1. **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-026-SIV-SD-0.0-0.5	ANTHRACENE	J	1.0	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.8	1.9	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	9.1	21	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.9	PQL	ug/Kg	
SED-027-SIV-SD-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.94	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	21	PQL	ug/Kg	
	CHRYSENE	J	0.85	1.9	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	0.94	1.9	PQL	ug/Kg	
	PHENANTHRENE	J	1.0	1.9	PQL	ug/Kg	
SL-002-SA5C-SB-9.0-10.0	CHRYSENE	J	0.41	2.0	PQL	ug/Kg	J (all detects)
SL-004-SA5C-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.3	21	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.50	2.0	PQL	ug/Kg	
SL-004-SA5C-SB-9.0-10.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	22	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.53	2.0	PQL	ug/Kg	
SL-126-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	0.82	1.7	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.73	1.7	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.6	19	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	1.5	1.7	PQL	ug/Kg	
	PHENANTHRENE	J	0.75	1.7	PQL	ug/Kg	
	PYRENE	J	1.5	1.7	PQL	ug/Kg	
SL-128-SA5B-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.86	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.41	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	10	19	PQL	ug/Kg	
	Di-n-butylphthalate	J	7.0	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.98	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: December 14, 2010

LDC Report Date: May 11, 2011

Matrix: Soil/Water

Parameters: Volatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SL-060-SA5C-SB-10.0-11.0
SL-004-SA5C-SB-4.0-5.0MS

Introduction

This data review covers 7 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
12/16/10	2-Hexanone	30	All soil samples in SDG DE039	J (all detects) UJ (all non-detects)	A
12/17/10	Chlorotrifluoroethene	30	All water samples in SDG DE039	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 DE039	J (all detects) UJ (all non-detects)	A
11/10/10	Acetone	40	All water samples in SDG DE039	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
VBLKB18	12/16/10	Methylene chloride Chloroform	1.0 ug/Kg 0.4 ug/Kg	All soil samples in SDG DE039

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-002-SA5C-SB-4.0-5.0	Methylene chloride	1.2 ug/Kg	4.2U ug/Kg
SL-002-SA5C-SB-9.0-10.0	Methylene chloride	0.88 ug/Kg	4.1U ug/Kg
SL-004-SA5C-SB-9.0-10.0	Methylene chloride	1.1 ug/Kg	3.9U ug/Kg
SL-004-SA5C-SB-4.0-5.0	Methylene chloride	0.97 ug/Kg	4.4U ug/Kg
SL-140-SA5C-SB-3.0-4.0	Methylene chloride	2.8 ug/Kg	4.2U ug/Kg
SL-060-SA5C-SB-10.0-11.0	Methylene chloride	3.3 ug/Kg	4.0U ug/Kg

Sample EB02-SA5B-121410 was identified as an equipment 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) samples were reviewed for each matrix as applicable. Percent recoveries (%R) 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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SL-060-SA5C-SB-10.0-11.0	2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE039	EB02-SA5B-121410	Chlorotrifluoroethene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SL-060-SA5C-SB-10.0-11.0	2-Hexanone	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE039	EB02-SA5B-121410	Acetone	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE039	SL-002-SA5C-SB-4.0-5.0	Methylene chloride	4.2U ug/Kg	A	B
DE039	SL-002-SA5C-SB-9.0-10.0	Methylene chloride	4.1U ug/Kg	A	B
DE039	SL-004-SA5C-SB-9.0-10.0	Methylene chloride	3.9U ug/Kg	A	B
DE039	SL-004-SA5C-SB-4.0-5.0	Methylene chloride	4.4U ug/Kg	A	B
DE039	SL-140-SA5C-SB-3.0-4.0	Methylene chloride	4.2U ug/Kg	A	B
DE039	SL-060-SA5C-SB-10.0-11.0	Methylene chloride	4.0U ug/Kg	A	B

Santa Susana Field Laboratory
Volatiles - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J1a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/11/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EF
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: 12/14/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤ 25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	MS only
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	EB = 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-002-SA5C-SB-4.0-5.0 S	11	VBLKB18	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12	VBLK144	22		32	
3	EB02-SA5B-121410 W	13		23		33	
4	SL-004-SA5C-SB-9.0-10.0 S	14		24		34	
5	SL-004-SA5C-SB-4.0-5.0	15		25		35	
6	SL-140-SA5C-SB-3.0-4.0	16		26		36	
7	SL-060-SA5C-SB-10.0-11.0	17		27		37	
8	#5 MS	18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25337J1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
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?	✓			
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?	✓			
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?	✓			
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.	✓			
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?			✓	
Matrix spike/Matrix spike duplicate				
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?	✓			
Laboratory control samples (LCS)				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337J1a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

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				
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				
Overall assessment of data was found to be acceptable.	✓			
XVI. Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XVII. Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25337N/a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 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	ICV	Z	28		all soils	J/UJ/A (c)
	11/10/10	ICV	F	40		all water	↓
	12/16/10 15:47	CCV	Z	30		all soils	↓
	12/17/10 20:52	CCV	*	30		all water	↓
		* chlorotrifluoroethene					

CONCAL_8260B.1S

LDC #: 25337J1a

VALIDATION FINDINGS WORKSHEET
Blanks

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a method blank associated with every sample in this SDG?
Y N N/A Was a method blank analyzed at least once every 12 hours for each matrix and concentration?
Y N N/A Was there contamination in the method blanks? If yes, please see the qualifications below.

Blank analysis date: 12/16/10
Conc. units: ug/kg
Associated Samples: All soils (B)

Compound	Blank ID	Sample Identification								
[redacted]	VBLKB18		1	2	4	5	6	7		
E	1.0		1.2/4.2U	0.88/4.1U	1.1/3.9U	0.97/4.4U	2.8/4.2U	3.3/4.0U		
K	0.4		-	-	-	-	-	-		
CRQL										

Blank analysis date:
Conc. units:
Associated Samples:

Compound	Blank ID	Sample Identification								
[redacted]										
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 #: 25337J1a

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
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
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5V std)	Recalculated RRF (5V std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL soil	12/23/10	C (1st internal standard)	0.3865	0.3865	0.3806	0.3806	4	4
			EE (2nd internal standard)	1.5410	1.5410	1.6059	1.6059	7	7
			JJJ (3rd internal standard)	1.3628	1.3628	1.4115	1.4115	9	9
			(4th internal standard)						
2	ICAL water	11/10/10	C (1st internal standard)	0.4983	0.4983	0.5095	0.5095	2	2
			EE (2nd internal standard)	1.926	1.926	1.940	1.940	7	7
			JJJ (3rd internal standard)	1.5950	1.5950	1.5784	1.5784	7	7
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J1a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 15:47	12/16/10	C (1st internal standard)	0.3806	0.3555	0.3555	7	7
			EE (2nd internal standard)	1.6059	1.5158	1.5158	6	6
			JJJ (3rd internal standard)	1.4115	1.1610	1.1610	18	18
			(4th internal standard)					
2	CCV 20:31	12/17/10	C (1st internal standard)	0.5095	0.4791	0.4791	6	4
			EE (2nd internal standard)	1.9401	1.9752	1.9752	2	2
			JJJ (3rd internal standard)	1.5784	1.5940	1.5940	1	1
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J/a

VALIDATION FINDINGS WORKSHEET

Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane	50.0	51.735	103	103	0
1,2-Dichloroethane-d4	↓	49.543	99	99	↓
Toluene-d8		48.740	97	97	
Bromofluorobenzene		46.168	92	92	

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25337J/a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentration

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD sample: 8

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	19.94	NA	ND	22.77	NA	114	114				
Trichloroethene	↓	↓	↓	20.53	↓	103	103				
Benzene	↓	↓	↓	21.55	↓	108	108				
Toluene	↓	↓	↓	20.76	↓	104	104				
Chlorobenzene	↓	↓	↓	19.77	↓	99	99	NA			

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 #: 25337/a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = | LCS - LCSD | * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: VOA/D 8011L

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	20.29	20.10	101	101	100	100	1	1
Trichloroethene	↓	↓	20.12	20.07	101	101	100	100	0	0
Benzene			20.94	20.90	105	105	105	105	0	0
Toluene			20.14	20.07	101	101	100	100	0	0
Chlorobenzene			19.51	19.51	98	98	98	98	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 #: 25337J1a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. #1, cc:

Conc. = $\frac{(1329)(50)(5)}{(723017)(0.856)(5.03)(0.938)}$

=

0.11 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: December 14, 2010

LDC Report Date: May 11, 2011

Matrix: Soil/Water

Parameters: 1,4-Dioxane

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
TB-121410
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SL-060-SA5C-SB-10.0-11.0

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 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%.

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% .

The percent differences (%D) of the second source calibration standard were less than or equal to 25.0% .

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-121410 was identified as a trip blank. No 1,4-dioxane was found in this blank.

Sample EB02-SA5B-121410 was identified as an equipment 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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 TB-121410 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
1,4-Dioxane - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J1b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/11/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EJ
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: 12/14/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	~~SW~~ A	
VII.	Matrix spike/Matrix spike duplicates	N	client specific
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 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-002-SA5C-SB-4.0-5.0 S	11	VBLKE72	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12	VBLKE71	22		32	
3	TB-121410 W	13		23		33	
4	EB02-SA5B-121410	14		24		34	
5	SL-004-SA5C-SB-9.0-10.0 S	15		25		35	
6	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	16		26		36	
7	SL-140-SA5C-SB-3.0-4.0	17		27		37	
8	SL-060-SA5C-SB-10.0-11.0	18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25337J1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Volatiles (EPA SW 846 Method 8260B)

Validation Area	Yes	No	NA	Findings/Comments
Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
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?	✓			
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?	✓			
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?	✓			
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.		✓		
Surrogate spikes				
Were all surrogate %R within QC limits?	✓	NA		
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?		✓		
Matrix spikes				
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?			✓	
LCS				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337J1b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

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?	✓			
X 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?	✓			
X Target Compounds				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	NA		✓	
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	NA		✓	
Were chromatogram peaks verified and accounted for?	✓			
X TICs				
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?	✓			
X 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)?			✓	
X System Performance				
System performance was found to be acceptable.	✓			
X Overall Assessment				
Overall assessment of data was found to be acceptable.	✓			
X Field Duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
X Field Blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

TARGET COMPOUND WORKSHEET

METHOD: VOA (EPA SW 846 Method 8260B)

A. Chloromethane*	U. 1,1,2-Trichloroethane	OO. 2,2-Dichloropropane	III. n-Butylbenzene	CCCC.1-Chlorohexane
B. Bromomethane	V. Benzene	PP. Bromochloromethane	JJJ. 1,2-Dichlorobenzene	DDDD. Isopropyl alcohol
C. Vinyl choride**	W. trans-1,3-Dichloropropene	QQ. 1,1-Dichloropropene	KKK. 1,2,4-Trichlorobenzene	EEEE. Acetonitrile
D. Chloroethane	X. Bromoform*	RR. Dibromomethane	LLL. Hexachlorobutadiene	FFFF. Acrolein
E. Methylene chloride	Y. 4-Methyl-2-pentanone	SS. 1,3-Dichloropropane	MMM. Naphthalene	GGGG. Acrylonitrile
F. Acetone	Z. 2-Hexanone	TT. 1,2-Dibromoethane	NNN. 1,2,3-Trichlorobenzene	HHHH. 1,4-Dioxane
G. Carbon disulfide	AA. Tetrachloroethene	UU. 1,1,1,2-Tetrachloroethane	OOO. 1,3,5-Trichlorobenzene	IIII. Isobutyl alcohol
H. 1,1-Dichloroethene**	BB. 1,1,2,2-Tetrachloroethane*	VV. Isopropylbenzene	PPP. trans-1,2-Dichloroethene	JJJJ. Methacrylonitrile
I. 1,1-Dichloroethane*	CC. Toluene**	WW. Bromobenzene	QQQ. cis-1,2-Dichloroethene	KKKK. Propionitrile
J. 1,2-Dichloroethene, total	DD. Chlorobenzene*	XX. 1,2,3-Trichloropropane	RRR. m,p-Xylenes	LLLL. Ethyl ether
K. Chloroform**	EE. Ethylbenzene**	YY. n-Propylbenzene	SSS. o-Xylene	MMMM. Benzyl chloride
L. 1,2-Dichloroethane	FF. Styrene	ZZ. 2-Chlorotoluene	TTT. 1,1,2-Trichloro-1,2,2-trifluoroethane	NNNN.
M. 2-Butanone	GG. Xylenes, total	AAA. 1,3,5-Trimethylbenzene	UUU. 1,2-Dichlorotetrafluoroethane	OOOO.
N. 1,1,1-Trichloroethane	HH. Vinyl acetate	BBB. 4-Chlorotoluene	VVV. 4-Ethyltoluene	PPPP.
O. Carbon tetrachloride	II. 2-Chloroethylvinyl ether	CCC. tert-Butylbenzene	WWW. Ethanol	QQQQ.
P. Bromodichloromethane	JJ. Dichlorodifluoromethane	DDD. 1,2,4-Trimethylbenzene	XXX. Di-isopropyl ether	RRRR.
Q. 1,2-Dichloropropane**	KK. Trichlorofluoromethane	EEE. sec-Butylbenzene	YYY. tert-Butanol	SSSS.
R. cis-1,3-Dichloropropene	LL. Methyl-tert-butyl ether	FFF. 1,3-Dichlorobenzene	ZZZ. tert-Butyl alcohol	TTTT.
S. Trichloroethene	MM. 1,2-Dibromo-3-chloropropane	GGG. p-Isopropyltoluene	AAAA. Ethyl tert-butyl ether	UUUU.
T. Dibromochloromethane	NN. Methyl ethyl ketone	HHH. 1,4-Dichlorobenzene	BBBB. tert-Amyl methyl ether	VVVV.

* = System performance check compounds (SPCC) for RRF ; ** = Calibration check compounds (CCC) for %RSD.

LDC #: 25337J16

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: 0

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs
X = Mean of the RRFs

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (5 std)	Recalculated RRF (5 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL SOIL	11/07/10	1,4-Dioxane (1st internal standard)	1.3539	1.3539	1.3396	1.3396	2	2
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
2	ICAL Water	11/01/10	1,4-Dioxane (1st internal standard)	(10) 1.3359	(10) 1.3359	1.3219	1.3219	1	1
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
3			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						
4			(1st internal standard)						
			(2nd internal standard)						
			(3rd internal standard)						
			(4th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J1b

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: CA

METHOD: GC/MS VOA (EPA SW 846 Method 8260B)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 10:02	12/17/10	1,4 - Dioxane (1st internal standard)	1.3396	1.3988	1.3988	10	10
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
2	CCV 16:30	12/16/10	↓ (1st internal standard)	1.3219	1.3014	1.3014	10	10
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
3			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					
4			(1st internal standard)					
			(2nd internal standard)					
			(3rd internal standard)					
			(4th internal standard)					

Comments: Refer to 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 #: 25337J/1b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8	10	9.844	98	98	0
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Dibromofluoromethane					
1,2-Dichloroethane-d4					
Toluene-d8					
Bromofluorobenzene					

LDC #: 25337J16

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratoy control sample and laboratory control sample duplicate (if applicable) were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * SSC/SA Where: SSC = Spiked sample concentration
SA = Spike added

RPD = I LCS - LCSD I * 2/(LCS + LCSD) LCS = Laboraotry control sample percent recovery LCSD = Laboratory control sample duplicate percent recovery

LCS ID: lcs10 soil

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~~ 1,4-Dioxane	125.0	125.0	127.96	126.57	102	102	101	101	1	1
Trichloroethene										
Benzene										
Toluene										
~~Chlorobenzene~~										

Comments: Refer to Laboratory Control Sample findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J1b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Y N N/A Were all reported results recalculated and verified for all level IV samples?

Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

RRF = Relative response factor of the calibration standard.

V_o = Volume or weight of sample pruged in milliliters (ml) or grams (g).

Df = Dilution factor.

%S = Percent solids, applicable to soils and solid matrices only.

Example:

Sample I.D. _____, _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)}$

= MP

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 12, 2011
Matrix:	Soil/Sediment/Water
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5
SL-060-SA5C-SB-10.0-11.0
SL-002-SA5C-SB-4.0-5.0MS
SL-002-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 12 soil samples, 5 sediment samples, and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C 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 semilvolatile contaminants were found in the method blanks.

Sample EB02-SA5B-121410 was identified as an equipment blank. No semivolatile 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-002-SA5C-SB-4.0-5.0MS/MSD (SL-002-SA5C-SB-4.0-5.0)	Benzidine	27 (35-141)	-	37 (≤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) 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/D water (All water samples in SDG DE039)	2-Chlorophenol	-	109 (77-108)	-	J (all detects)	P
	2-Methylphenol	-	102 (64-101)	-	J (all detects)	
	2,4-Dimethylphenol	-	117 (72-110)	-	J (all detects)	
	2,4-Dichlorophenol	-	117 (80-109)	-	J (all detects)	
	2,4,5-Trichlorophenol	-	108 (79-107)	-	J (all detects)	
	Dibenzofuran	-	111 (83-108)	-	J (all detects)	
	1,2-Diphenylhydrazine	-	118 (78-116)		J (all detects)	
LCS/D water (All water samples in SDG DE039)	Benzoic acid	-	-	44 (≤30)	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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0	Benzidine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE039	EB02-SA5B-121410	2-Chlorophenol 2-Methylphenol 2,4-Dimethylphenol 2,4-Dichlorophenol 2,4,5-Trichlorophenol Dibenzofuran 1,2-Diphenylhydrazine	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	P	Laboratory control samples (%R) (L)
DE039	EB02-SA5B-121410	Benzoic acid	J (all detects) UJ (all non-detects)	P	Laboratory control samples (RPD) (L)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J2a **VALIDATION COMPLETENESS WORKSHEET** Date: 5/11/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: D
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: 12/14/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30, r²
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 25
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	LCS ID
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	EB = 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, sediment, water

1	SL-002-SA5C-SB-4.0-5.0 S	11	SL-126-SA5B-SS-0.0-0.5 S	21	SBLKF354	31	
2	SL-002-SA5C-SB-9.0-10.0	12	SL-129-SA5B-SS-0.0-0.5	22	SBLKWB350	32	
3 N	EB02-SA5B-121410 W	13	SL-128-SA5B-SS-0.0-0.5	23		33	
4	SL-004-SA5C-SB-9.0-10.0 S	14	SED-027-SIV-SD-0.0-0.5 Sed	24		34	
5	SL-004-SA5C-SB-4.0-5.0	15	SED-026-SIV-SD-0.0-0.5	25		35	
6	SL-140-SA5C-SB-3.0-4.0	16	SL-060-SA5C-SB-10.0-11.0 S	26		36	
7	SED-024-SIV-SD-0.0-0.5 Sed	17	#1 MS	27		37	
8	SED-023-SIV-SD-0.0-0.5	18	#1 MSD	28		38	
9	SED-022-SIV-SD-0.0-0.5	19		29		39	
10	SL-125-SA5B-SS-0.0-0.5 S	20		30		40	

LDC #: 25337J2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
GC/MS				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
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?	✓			
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?	✓			
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.		✓		
Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Matrix spikes				
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?		✓		
LCS				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337J2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
[illegible]				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
[illegible]				
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?	✓			
[illegible]				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
[illegible]				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
[illegible]				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?	✓		✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?	✓		✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?	✓		✓	
[illegible]				
System performance was found to be acceptable.		✓		
[illegible]				
Overall assessment of data was found to be acceptable.	✓			
[illegible]				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
[illegible]				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU. 1, 2 -Piphenylhydrazine
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25337J2a

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates

Page: 1 of 7
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A 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
		17+18	SSS	27 (35-141)	( )	37 (30)	1	J/UJ/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 25337J2S

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Was a LCS required?

Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		lcs/D son water	C	( )	109 (77-108)	( )	All water	J/Pdet (L)
			G	( )	102 (64-101)	( )	↓	↓
			O	( )	117 (72-110)	( )		
		PPP	~~SSS~~	( )	( )	44 (30)		J/UJ/P
			Q	( )	117 (80-109)	( )		J/Pdet
			Z	( )	108 (79-107)	( )		↓
			JJ	( )	111 (83-108)	( )		
			UUU	( )	118 (78-116)	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

LDC #: 25357J2S

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL WATER	9/24/10	Phenol (1st internal standard)	1.845	1.845	1.816	1.816	6	6
			2-nitrophenol Naphthalene (2nd internal standard)	0.217	0.217	0.214	0.214	3	3
			2-nitroaniline Fluorene (3rd internal standard)	0.422	0.422	0.408	0.406	2	2
			Pentachlorophenol (4th internal standard)	0.194	0.194	0.186	0.186	5	5
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0644	0.644	0.638	0.638	1	1
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.177	1.177	1.141	1.141	3	3
2	ICAL SOIL	1/12/11	Phenol (1st internal standard)	2.133	2.133	2.123	2.123	5	5
			2-nitrophenol Naphthalene (2nd internal standard)	0.198	0.198	0.190	0.190	8	8
			2-nitroaniline Fluorene (3rd internal standard)	0.375	0.375	0.343	0.343	14	14
			Pentachlorophenol (4th internal standard)	0.163	0.163	0.149	0.149	14	14
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.749	0.749	0.672	0.672	14	14
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.591	1.591	1.323	1.323	21	21
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 8:35	1/14/11	Phenol (1st internal standard)	2.123	2.109	2.109	1	1
			2-nitrophenol Naphthalene (2nd internal standard)	0.190	0.197	0.197	4	4
			2-nitroaniline Fluorene (3rd internal standard)	0.343	0.369	0.369	8	8
			Pentachlorophenol (4th internal standard)	0.149	0.142	0.142	5	5
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.672	0.717	0.717	7	7
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	1.323	1.583	1.583	5	5
2	CCV 19:53	1/12/11	Phenol (1st internal standard)		2.236	2.236	5	5
			2-nitrophenol Naphthalene (2nd internal standard)		0.202	0.202	6	6
			2-nitroaniline Fluorene (3rd internal standard)		0.389	0.389	13	13
			Pentachlorophenol (4th internal standard)		0.163	0.163	9	9
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.759	0.759	13	13
			Di-n-octylphthalate Benzo(a)pyrene (6th internal standard)	↓	1.642	1.642		
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J09

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 21:53	12/30/10	Phenol (1st internal standard)	1.816	1.700	1.70	6	6
			~~Naphthalene~~ 2-nitrophenol (2nd internal standard)	0.214	0.210	0.210	2	2
			~~Fluorene~~ 2-nitroaniline (3rd internal standard)	0.408	0.400	0.400	2	2
			Pentachlorophenol (4th internal standard)	0.186	0.161	0.161	14	14
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.638	0.657	0.657	3	3
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)	1.141	1.222	1.222	7	7
2	CCV 20:27	12/31/10	Phenol (1st internal standard)		1.851	1.851	2	2
			~~Naphthalene~~ 2-nitrophenol (2nd internal standard)		0.217	0.217	1	1
			~~Fluorene~~ 2-nitroaniline (3rd internal standard)		0.416	0.416	2	2
			Pentachlorophenol (4th internal standard)		0.159	0.159	14	14
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.650	0.650	2	2
			~~Benzo(a)pyrene~~ Di-n-octylphthalate (6th internal standard)		1.191	1.191	4	4
3	CCV		Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J29

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 6 of 7
Reviewer: FT
2nd reviewer: (n)

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	82.292	82	82	0
2-Fluorobiphenyl	↓	92.405	92	92	
Terphenyl-d14	↓	85.312	85	85	
Phenol-d5	200	168.784	84	84	
2-Fluorophenol	↓	170.589	85	85	
2,4,6-Tribromophenol	↓	184.611	92	92	↓
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 #: 25337029

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 17 + 18

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol	1773.05	1773.05	ND	1534.70	1577.35	86	86	89	89	3	3
N-Nitroso-di-n-propylamine				1389.21	1448.60	78	78	82	82	5	5
4-Chloro-3-methylphenol				1576.84	1557.51	89	89	88	88	1	1
Acenaphthene				1718.09	1738.80	97	97	98	98	1	1
Pentachlorophenol				1345.94	1469.03	76	76	83	83	9	9
Pyrene				1727.52	1737.33	97	97	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 #: 25337J29

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 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	1495.23	NA	90	90				
N-Nitroso-di-n-propylamine			1414.30		85	85				
4-Chloro-3-methylphenol			1659.14		100	100				
Acenaphthene			1679.06		101	101				
Pentachlorophenol			1512.06		91	91				
Pyrene			1734.55		104	104	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J2C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #6 . EEE

Conc. = $\frac{(1478)(40)(1000)(\quad)(\quad)}{(654595)(0.672)(30)(0.899)}$

= 0.672

50 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:	December 14, 2010
LDC Report Date:	May 13, 2011
Matrix:	Soil/Sediment/Water
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5
SL-060-SA5C-SB-10.0-11.0
SL-002-SA5C-SB-4.0-5.0MS
SL-002-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 12 soil samples, 5 sediment samples, and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270C using Selected Ion Monitoring (SIM) for Semivolatiles.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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 semilvolatile contaminants were found in the method blanks with the following exceptions:

Method Blank ID	Extraction Date	Compound TIC (RT in minutes)	Concentration	Associated Samples
SBLKWH350	12/17/10	Butylbenzylphthalate	0.06 ug/L	All water samples in SDG DE039

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 TIC (RT in minutes)	Reported Concentration	Modified Final Concentration
EB02-SA5B-121410	Butylbenzylphthalate	0.060 ug/L	1.0U ug/L

Sample EB02-SA5B-121410 was identified as an equipment blank. No semivolatile contaminants were found in this blank with the following exceptions:

Equipment Blank ID	Sampling Date	Compound	Concentration	Associated Samples
EB02-SA5B-121410	12/14/10	Butylbenzylphthalate Di-n-butylphthalate Diethylphthalate Bis(2-ethylhexyl)phthalate Naphthalene Di-n-octylphthalate	0.060 ug/L 0.15 ug/L 0.12 ug/L 0.16 ug/L 0.027 ug/L 0.083 ug/L	SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5

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 with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-002-SA5C-SB-4.0-5.0MS/MSD (SL-002-SA5C-SB-4.0-5.0)	Diethylphthalate	70 (87-131)	72 (87-131)	-	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) 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
350WHLCS/D (All water samples in SDG DE039)	2-Methylnaphthalene	71 (75-115)	76 (75-115)	-	J (all detects) UJ (all non-detects)	P
	1-Methylnaphthalene	-	69 (71-117)	-		
	Chrysene	75 (76-116)	-	-		
	N-Nitrosodimethylamine	59 (70-130)	58 (70-130)	-		
	Dimethylphthalate	67 (70-130)	71 (70-130)	-		
	Diethylphthalate	67 (70-130)	65 (70-130)	-		
	Fluoranthene	-	67 (75-116)	-		
	Benzo(k)fluoranthene	-	71 (72-122)	-		
	Dibenzo(a,h)anthracene	-	69 (71-125)	-		
354LILCS (All soil and sediment samples in SDG DE039)	Diethylphthalate	63 (68-125)	-	-	J (all detects) UJ (all non-detects)	P
	Fluorene	69 (71-120)	-	-		
	Di-n-butylphthalate	81 (84-132)	-	-		
	Fluoranthene	76 (78-120)	-	-		
	Chrysene	77 (79-120)	-	-		
	Indeno(1,2,3-cd)pyrene	61 (62-141)	-	-		
	Dibenzo(a,h)anthracene	61 (62-142)	-	-		

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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0	Diethylphthalate	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE039	EB02-SA5B-121410	2-Methylnaphthalene 1-Methylnaphthalene Chrysene N-Nitrosodimethylamine Dimethylphthalate Diethylphthalate Fluoranthene Benzo(k)fluoranthene Dibenzo(a,h)anthracene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SL-060-SA5C-SB-10.0-11.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Diethylphthalate Fluorene Di-n-butylphthalate Fluoranthene Chrysene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	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 DE039

SDG	Sample	Compound TIC (RT in minutes)	Modified Final Concentration	A or P	Code
DE039	EB02-SA5B-121410	Butylbenzylphthalate	1.0U ug/L	A	B

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J2b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EF
SUOA 2nd Reviewer: AT

METHOD: GC/MS ~~Polynuclear Aromatic Hydrocarbons~~ (EPA SW 846 Method 8270C-SIM)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/14/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	% RSD ≤30
IV.	Continuing calibration/ICV	A	ICV/CCV ≤25
V.	Blanks	SW	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	SW	
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 = 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, sed + water

1	SL-002-SA5C-SB-4.0-5.0 S	11	SL-126-SA5B-SS-0.0-0.5 S	21	SBLKWH3509	31		
2	SL-002-SA5C-SB-9.0-10.0 S	12	SL-129-SA5B-SS-0.0-0.5	22	SBLKLI354	32		
3	EB02-SA5B-121410 W	13	SL-128-SA5B-SS-0.0-0.5	23		33		
4	SL-004-SA5C-SB-9.0-10.0 S	14	SED-027-SIV-SD-0.0-0.5 Sed	24		34		
5	SL-004-SA5C-SB-4.0-5.0 S	15	SED-026-SIV-SD-0.0-0.5	25		35		
6	SL-140-SA5C-SB-3.0-4.0 S	16	SL-060-SA5C-SB-10.0-11.0 S	26		36		
7	SED-024-SIV-SD-0.0-0.5 Sed	17	#1 MS	27		37		
8	SED-023-SIV-SD-0.0-0.5	18	#1 MSD	28		38		
9	SED-022-SIV-SD-0.0-0.5	19		29		39		
10	SL-125-SA5B-SS-0.0-0.5 S	20		30		40		

LDC #: 25337J2b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
[redacted]				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
[redacted]				
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
[redacted]				
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?	✓			
[redacted]				
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?	✓			
[redacted]				
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.	✓			
[redacted]				
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?			✓	
[redacted]				
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?		✓		
[redacted]				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337J2-b

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
[illegible]				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
[illegible]				
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?	✓			
[illegible]				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
[illegible]				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
[illegible]				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
[illegible]				
System performance was found to be acceptable.	✓			
[illegible]				
Overall assessment of data was found to be acceptable.	✓			
[illegible]				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
[illegible]				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.	✓			

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25337J2b

VALIDATION FINDINGS WORKSHEET
Blanks

Reviewer: FT

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 method blank analyzed for each matrix?

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: 12/17/10 **Blank analysis date:** 1/4/11

Conc. units: ug/L Associated Samples: All water (B)

Compound	Blank ID	Sample Identification								
[redacted]	SBLKWH350									
AAA	0.06		0.066/1.04							

Cont'd

Compound	Blank ID	Sample Identification								
[redacted]										

LDC #: 25337J2b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Field Blanks

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field blanks identified in this SDG?

Y N N/A Were target compounds detected in the field blanks?

Blank units: ug/L **Associated sample units:** ug/kg

Sampling date: 12/14/10

Field blank type: (circle one) Field Blank / Rinsate / Other: EB

10-13
All soils + Sediments (ND+75%)

Compound	Blank ID	Sample Identification								
	3									
~~Diethylphthalate~~ AAA	0.060									
Di-n-butylphthalate XX	0.15									
Bis(2-ethylhexyl)phthalate LL	0.12									
EEE	0.16									
S	0.027									
FFF	0.083									
—	— — —									
CRQL										

CIRCLED RESULTS WERE NOT QUALIFIED. ALL RESULTS NOT CIRCLED WERE QUALIFIED BY THE FOLLOWING STATEMENT:
Common contaminants such as the phthalates and TICs noted above that were detected in samples within ten times the associated field blank concentration were qualified as not detected, "U". Other contaminants within five times the field blank concentration were also qualified as not detected, "U".

LDC #: 25337W2b

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

Y N N/A Was a MS/MSD analyzed every 20 samples of each matrix?

Y N N/A Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		17+18	LL	70 (87-131)	72 (87-131)	( )	1	J/UJ/A (Q)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		

LDC #: 25337J2b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a LCS required?

Y N N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		350WHLCSID	W	71 (75-115)	76 (75-115)	( )	all water	J / UJ / P (L)
			TTT	( )	69 (71-117)	( )		
			DDD	75 (76-116)	( )	( )		
			OOO	59 (70-130	58 (70-130	( )		
			CC	67 (70-130	71 (70-130	( )		
			LL	67 (↓)	65 (↓)	( )		
			YY	( )	67 (75-116)	( )		
			HHH	( )	71 (72-122	( )		
			KKK	( )	69 (71-125)	( )	↓	↓
				( )	( )	( )		
				( )	( )	( )		
		354LILCS	LL	63 (68-135)	( )	( )	all soil	R + J
			NN	69 (71-120)	( )	( )		
			XX	81 (84-137	( )	( )		
			YY	76 (78-129	( )	( )		
			DDD	77 (79-120	( )	( )		
			JJJ	61 (62-141	( )	( )		
			KKK	61 (62-142	( )	( )	↓	↓
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25337J26

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (1 std)	Recalculated RRF (1 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/4/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.134	1.134	1.149	1.149	7	7
			Fluorene (3rd internal standard)	1.329	1.329	1.363	1.363	6	6
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.218	1.218	1.212	1.212	7	7
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.238	1.238	1.287	1.287	6	6
			Benzo(a)pyrene (6th internal standard)	1.254	1.254	1.268	1.268	8	8
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337126

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 15:4X	1/4/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.149	1.110	1.110	3	3
			Fluorene (3rd internal standard)	1.363	1.330	1.330	2	2
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.212	1.164	1.164	4	4
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.287	1.216	1.216	6	6
			Benzo(a)pyrene (6th internal standard)	1.168	1.235	1.235	3	3
2			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J26

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: JO

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.693	69	69	0
2-Fluorobiphenyl	↓	0.647	64	64	↓
Terphenyl-d14	↓	0.754	75	75	↓
~~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 #: 25337J26

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = | MSC - MSC | * 2/(MSC + MSDC) MSC = Matrix spike concentration; MSDC = Matrix spike duplicate concentration

MS/MSD samples: 17 + 18

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc	Reported	Recalc	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	35.46	35.46	ND	26.68	27.46	75	75	77	77	3	3
Pentachlorophenol											
Pyrene	35.46	35.46	ND	27.41	28.50	77	77	80	80	4	4

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 #: 25337V2D

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: LCS/D water

Compound	Spike Added (ug/L)		Spike Concentration (ug/L)		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	1.0	1.0	0.75	0.78	75	75	78	78	4	4
Pentachlorophenol										
Pyrene	↓	↓	0.72	0.77	72	72	72	72	0	0

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 #: 25337J2b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x = Area of the characteristic ion (EICP) for the compound to be measured

A_{is} = Area of the characteristic ion (EICP) for the specific internal standard

I_s = Amount of internal standard added in nanograms (ng)

V_o = Volume or weight of sample extract in milliliters (ml) or grams (g).

V_i = Volume of extract injected in microliters (ul)

V_t = Volume of the concentrated extract in microliters (ul)

Df = Dilution Factor.

%S = Percent solids, applicable to soil and solid matrices only.

2.0 = Factor of 2 to account for GPC cleanup

Example:

Sample I.D. #2, Chrysene

Conc. = $\frac{(700)(1.0)(1000)(\quad)(\quad)}{(53446)(1.287)(30)(0.833)(\quad)}$ =

0.41 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: December 14, 2010

LDC Report Date: May 10, 2011

Matrix: Soil

Parameters: N-Nitrosodimethylamine

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0
SL-002-SA5C-SB-4.0-5.0MS
SL-002-SA5C-SB-4.0-5.0MSD

Introduction

This data review covers 7 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 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% .

IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

Percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were within the method criteria of less than or equal to 20.0% .

The percent difference (%D) of the second source calibration standard were less than or equal to 30.0% for all compounds.

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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
N-Nitrosodimethylamine - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J2c

SDG #: DE039

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 5/10/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

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: 12/14/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30
IV.	Continuing calibration/ICV	A	ICV ≤ 30 CCV ≤ 20
V.	Blanks	A	
VI.	Surrogate spikes	A	
VII.	Matrix spike/Matrix spike duplicates	A	
VIII.	Laboratory control samples	A	
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:

1	SL-002-SA5C-SB-4.0-5.0	11	SBLKLB3611	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	15		25		35	
6	#1 MS	16		26		36	
7	#1 MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

LDC #: 25337J2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

1625C

Method: ~~Semivolatiles (EPA SW-846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
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?	✓			
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ≤ ~~25%~~ 20 and relative response factors (RRF) ≥ 0.05?	✓			
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.		✓		
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?			✓	
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?	✓			
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337J2C

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
[illegible]				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
[illegible]				
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?	✓			
[illegible]				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
[illegible]				
Were the correct internal standard (IS), quantitation ion and relative response factor (RRF) used to quantitate the compound?	✓			
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
[illegible]				
Were the major ions (> 10 percent relative intensity) in the reference spectrum evaluated in sample spectrum?			✓	
Were relative intensities of the major ions within ± 20% between the sample and the reference spectra?			✓	
Did the raw data indicate that the laboratory performed a library search for all required peaks in the chromatograms (samples and blanks)?			✓	
[illegible]				
System performance was found to be acceptable.	✓			
[illegible]				
Overall assessment of data was found to be acceptable.	✓			
[illegible]				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
[illegible]				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337J2C

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

1625C

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound, 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 RRF (25 std)	Recalculated RRF (25 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/5/11	NDMA ~~Phenol~~ (1st internal standard)	1.044	1.044	1.125	1.125	7	7
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J2C

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

1625C

METHOD: GC/MS ~~BNA (EPA SW-846 Method 8270C)~~

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	CCV 16:45	1/5/11	~~Phenol~~ NDMA (1st internal standard)	1.12504	1.08931	1.08931	3.17611	3.17611
			~~Naphthalene (2nd internal standard)~~					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
2	CCV 19:00	1/5/11	~~Phenol~~ NDMA (1st internal standard)	↓	1.05338	1.05338	6.36946	6.36946
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					
3	CCV 22:09	1/5/11	Phenol NDPMA (1st internal standard)	↓	1.04698	1.04698	6.93799	6.93799
			~~Naphthalene (2nd internal standard)~~					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			~~Benzo(a)pyrene (6th internal standard)~~					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J2C
1625C

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: ~~GC/MS Semivolatiles (EPA SW 846 Method 8270)~~

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
~~Nitrobenzene-d5~~ NDMA-d6	25.0	25.242	101	101	0
2-Fluorobiphenyl					
Terphenyl-d14					
~~Phenol-d5~~					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
~~1,2-Dichlorobenzene-d4~~					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25337J2C

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

1625C

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 6 + 7

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											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											
NDMA	886.52	886.52	111.63	941.87	894.26	94	94	88	88	6	6

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 #: 25337J2C

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

1625C

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 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										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene										
Pentachlorophenol										
Pyrene										
NDMA	833.33	ND	832.82	NA	100 U	100 U	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25 337J2C
1625 C

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_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. = $\frac{(22192)(25)(1000)(\quad)(\quad)}{(6650)(1.125)(30)(0.938)(\quad)}$

=

111.87 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: December 14, 2010

LDC Report Date: May 12, 2011

Matrix: Soil/Sediment/Water

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

EB02-SA5B-121410
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5

Introduction

This data review covers 4 soil samples, 5 sediment samples, and one water sample 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 with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/24/10	2P6356.05RCCV	RTXCLP1	Endosulfan II	21.5	All water samples in SDG DE039	J (all detects) UJ (all non-detects)	A
12/24/10	2P6356.05RCCV	RTXCLP2	4,4'-DDT	24.8	All water samples in SDG DE039	J (all detects) UJ (all non-detects)	A
12/29/10	1P10363.61CCV	RTXCLP1	Endosulfan I Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Methoxychlor Endosulfan sulfate Endrin ketone	28.6 26.4 27.1 30.2 46.3 28.7 40.0 24.6 36.3	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/29/10	1P10363.61CCV	RTXCLP2	Heptachlor epoxide Endosulfan I Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone	20.5 26.7 25.6 31.6 33.2 47.4 26.7 26.1 41.4 26.5	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	P
12/29/10	1P10363.61CCV	RTXCLP2	4,4'-DDE	23.6	SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	P
12/29/10	1P10363.62CCV	RTXCLP1	Mirex	29.6	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	A
12/29/10	1P10363.62CCV	RTXCLP2	Mirex	27.6	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	P

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% with the following exceptions:

Date	Standard ID	Column	Compound	%BD	Associated Samples	Affected Compounds	Flag	A or P
12/29/10	1P10363.60 PEM	RTXCLP1	4,4'-DDT	16.2	SL-129-SA5B-SS-0.0-0.5	4,4'-DDT	J (all detects) UJ (all non-detects)	A

V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide contaminants were found in the method blanks.

Sample EB02-SA5B-121410 was identified as an equipment blank. No chlorinated pesticide 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/D water (All water samples in SDG DE039)	4,4'-DDE	-	137 (66-130)	-	J (all detects)	P
LCS/D soil (All soil and sediment samples in SDG DE039)	Methoxychlor	131 (59-125)	-	-	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

XII. Target Compound Identification

All target compound identifications were within validation criteria.

XIII. Compound Quantitation and Reported 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
SED-024-SIV-SD-0.0-0.5	delta-BHC Heptachlor	60.48 46.10	J (all detects) J (all detects)	A
SED-023-SIV-SD-0.0-0.5	delta-BHC	49.61	J (all detects)	A
SED-022-SIV-SD-0.0-0.5	gamma-BHC delta-BHC 4,4'-DDT Endrin aldehyde	47.81 74.31 89.72 92.84	J (all detects) J (all detects) J (all detects) J (all detects)	A
SL-126-SA5B-SS-0.0-0.5	delta-BHC	75.53	J (all detects)	A
SL-129-SA5B-SS-0.0-0.5	gamma-BHC delta-BHC Dieldrin Endrin aldehyde	41.39 64.77 70.67 65.22	J (all detects) J (all detects) J (all detects) J (all detects)	A
SED-026-SIV-SD-0.0-0.5	alpha-BHC	56.90	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	EB02-SA5B-121410	Endosulfan II 4,4'-DDT	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE039	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Endosulfan I Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Methoxychlor Endosulfan sulfate Endrin ketone Mirex	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE039	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Heptachlor epoxide Endosulfan I Dieldrin Endrin Endosulfan II 4,4'-DDT Endrin aldehyde Endosulfan sulfate Methoxychlor Endrin ketone Mirex	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE039	SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	4,4'-DDE	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE039	SL-129-SA5B-SS-0.0-0.5	4,4'-DDT	J (all detects) UJ (all non-detects)	A	Continuing calibration (PEM %D) (M)
DE039	EB02-SA5B-121410	4,4'-DDE	J (all detects)	P	Laboratory control samples (%R)(L)
DE039	SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Methoxychlor	J (all detects)	P	Laboratory control samples (%R)(L)
DE039	SED-024-SIV-SD-0.0-0.5	delta-BHC Heptachlor	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	SED-023-SIV-SD-0.0-0.5 SL-126-SA5B-SS-0.0-0.5	delta-BHC	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SED-022-SIV-SD-0.0-0.5	gamma-BHC delta-BHC 4,4'-DDT Endrin aldehyde	J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	SL-129-SA5B-SS-0.0-0.5	gamma-BHC delta-BHC Dieldrin Endrin aldehyde	J (all detects) J (all detects) J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	SED-026-SIV-SD-0.0-0.5	alpha-BHC	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	EB02-SA5B-121410 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J3a
SDG #: DE039
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 5/11/12
Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 12/14/10
II.	GC/ECD Instrument Performance Check	SW	pre CCV
III.	Initial calibration	A	% RSD ≤20 , r^2
IV.	Continuing calibration/ICV	SW	ICV/CCV ≤20
V.	Blanks	A	
VI.	Surrogate spikes	SW	
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	SW	
XIV.	Overall assessment of data	A	
XV.	Field duplicates	N	
XVI.	Field blanks	ND	FB = 1

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: Sed, soil, water

1	EB02-SA5B-121410 W	11	PBLK16352	21		31	
2	SED-024-SIV-SD-0.0-0.5 Sed	12	PBLK29351	22		32	
3	SED-023-SIV-SD-0.0-0.5 ↓	13		23		33	
4	SED-022-SIV-SD-0.0-0.5 ↓	14		24		34	
5	SL-125-SA5B-SS-0.0-0.5 S	15		25		35	
6	SL-126-SA5B-SS-0.0-0.5 ↓	16		26		36	
7	SL-129-SA5B-SS-0.0-0.5 ↓	17		27		37	
8	SL-128-SA5B-SS-0.0-0.5 ↓	18		28		38	
9	SED-027-SIV-SD-0.0-0.5 Sed	19		29		39	
10	SED-026-SIV-SD-0.0-0.5 ↓	20		30		40	

Notes: _____

LDC #: 25337J3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: EV
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%.0 for individual breakdown in the Evaluation mix standards?		✓		
Was a continuing calibration analyzed daily? 80-120 20	✓			
Were all percent differences (%D) ≤ ~~15~~%.0 or percent recoveries ~~85-115%~~?		✓		
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?	NA	✓		
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?			✓	

LDC #: 25337J3
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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 #: 25337N3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer: A

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? __%D or __RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ~~≤15.0%~~ 20?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ ~~15.0~~ 20)	RT (limit)	Associated Samples	Qualifications
	12/21/10	2P6356.05RCCV	RTX CLP1	L	21.5	( )	all water	J/UJ/A (C)
			RTX CLP2	O	24.8	( )	↓	↓
						( )		
						( )		
	12/29/10	IP10363.60PEM (Breakdown	RTX CLP1	O	18.2 (F)	15% ( )	PBLK 2935 1,	no qual ND
						( )	2, 3, 4, 5, 6	
						( )		
						( )		
	12/29/10	IP10363.61-CCV	RTX CLP1	H	26.6	( )	7, 8, 9, 10	J/UJ/A (C)
				I	26.4	( )	↓	↓
				K	27.1	( )		
				L	30.2	( )		
				O	46.3	( )		
				R	28.7	( )		
				P	40.0	( )		
				N	24.6	( )		
				Q	36.3	( )	↓	↓
			RTX CLP2	G	20.5	( )	7, 8, 9, 10	J/UJ/P (C)
				H	26.7	( )	↓	
			✓	J	23.6	( )	8, 9, 10	
				I	25.6	( )	7, 8, 9, 10	
				K	31.6	( )		
				L	33.2	( )		
				O	47.4	( )	↓	↓

LDC #: 25337J3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC ___ HPLC

2nd Reviewer:

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤15.0%? 20
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 15.0) 20	RT (limit)	Associated Samples	Qualifications
	12/29/10	IP10363.61 CCV	RTX CLP2	R	26.7	( )	7, 8, 9, 10	J/UJ/P (C)
				N	26.1	( )	↓	↓
				P	41.4	( )		
				Q	26.5	( )		
						( )		
						( )		
	12/29/10	IP10363.62 CCV	RTX CLP1	Mirex	29.6	( )	↓	J/UJ/A (C)
			RTX CLP2	↓	27.6	( )		J/UJ/P
						( )		
						( )		
	12/29/10	IP10363.60 PEM	RTX CLP1	Θ	16.2 (≤ 15%)	( )	7	J/UJ/A qual DDT only (* 14)
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 25337J 39

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

(S)

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	7	RTX cl2	O	129 (20 - 120)	J/A det qual A, B, C, P, E, & F
				( )	
				( )	
	10	RTX cl2	O	0 (20 - 120)	J/R/A qual all ex cept O
			Y	18 (50 - 130)	↓ ↓
				( )	
				( )	
				( )	
	2, 4	55 % Recovery	outside limit	( )	no qual SX PL
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25337J3a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	lcs/D water	J	( )	137 (66-134)	( )	All water	J/Pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	lcs soil	P	131 (59-125)	( )	( )	All soil 8-56	J/Pdet (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25337J3a

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 columns ≤ 40 Finding	Associated Samples	Qualifications
	C	60.48	2	J/A det (* X III)
	E	46.10	↓	↓
	C	49.61	3	
	D	47.81	4	
	C	74.31		
	O	89.72		
	R	92.84		
	C	75.53	6	
	D	41.39	7	
	C	64.77		
	I	70.67		
	R	65.22	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25337J3a

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	%RPD But 2 column Finding < 40	Associated Samples	Qualifications
	A	56-90	10	J/A det (*X111)

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25 337J 3c
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JTG
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10/std)	Recalculated CF (10/std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL IP6356	12/22/10	endosulfan 1 RTXCLP1	5.13×10^2	5.13×10^2	5.20×10^2	5.20×10^2	2.5	2.5
			methoxyclor	1.60×10^2	1.60×10^2	1.66×10^2	1.66×10^2	4.7	4.7
			RTXCLP2	5.14×10^3	5.14×10^3	5.23×10^3	5.23×10^3	4.0	4.0
2			↓	1.22×10^3	1.22×10^3	1.25×10^3	1.25×10^3	3.5	3.5
3	ICAL IP10363	12/29/10	↓ RTX CLP1	4.10×10^3	4.10×10^3	4.19×10^3	4.19×10^3	2.8	2.8
			↓	1.11×10^3	1.11×10^3	1.13×10^3	1.13×10^3	5.2	5.2
			RTXCLP2	1.92×10^3	1.92×10^3	1.99×10^3	1.99×10^3	4.6	4.6
4			↓	7.65×10^2	7.65×10^2	7.85×10^2	7.85×10^2	7.0	7.0

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 #: 25337J3c
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

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

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 10/100 CF (std)	Recalculated 10/100 CF (std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/7/11	endosulfan I RTX CLP1	3.78×10^3	3.78×10^3	3.95×10^3	3.95×10^3	3.8	3.8
			methoxychlor	1.08×10^3	1.08×10^3	1.14×10^3	1.14×10^3	8.7	8.7
			RTX CLP2	1.82×10^3	1.82×10^3	1.92×10^3	1.92×10^3	4.9	4.9
2		1/12/11	↓	7.39×10^2	7.39×10^2	7.83×10^2	7.83×10^2	8.9	8.9
			↓ RTX CLP1	3.98×10^3	3.98×10^3	4.23×10^3	4.23×10^3	3.9	3.9
			↓	1.06×10^3	1.06×10^3	1.14×10^3	1.14×10^3	7.1	7.1
3			↓ RTX CLP2	2.20×10^3	2.20×10^3	2.30×10^3	2.30×10^3	3.0	3.0
				4.74×10^2	4.74×10^2	5.10×10^2	5.10×10^2	5.4	5.4
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 #: 25337J3c
SDG #: per 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 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	2P635605R	12/24/10	endosulfan I RTXCLP1	10.0	8.63	8.63	13.7	13.7
			methoxychlor	100.0	87.94	87.94	12.1	12.1
			RTXCLP2	↓	9.05	9.05	9.5	9.5
2			↓	↓	94.52	94.52	5.5	5.5
3	1P10363.6	12/29/10	↓ RTXCLP1	10.0	7.14	7.14	28.6	28.6
			↓	100	60.01	60.01	40.0	40.0
			RTXCLP2	10.0	7.33	7.33	26.7	26.7
4			↓	10U	58.61	58.61	41.4	41.4

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 #: 25 337J 3a
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer:
2nd reviewer:

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	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene	RTXCLP1	1.04	0.923717	89	89	0
Tetrachloro-m-xylene	RTXCLP2	↓	0.898354	86	86	↓
Decachlorobiphenyl	↓	1.0	0.192945	19	19	↓
Decachlorobiphenyl	↓	↓	1.493997	143	143	↓

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 #: 25337J3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate 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 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: LCSID water

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	Recalc.
gamma-BHC	0.099	0.099	0.094	0.10	95	95	101	101	6	6
4,4'-DDT	0.2	0.2	0.17	0.18	85	85	90	90	6	6

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 #: 25337J3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

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 delta-BHC

$$\text{Conc.} = \frac{(5814)(10000)(2)}{(2.38 \times 10^3)(60)(0.872)(1000)}$$

$$= 0.9338 \text{ ug/kg}$$

#	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:	December 14, 2010
LDC Report Date:	May 12, 2011
Matrix:	Soil/Sediment/Water
Parameters:	Polychlorinated Biphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5
SL-060-SA5C-SB-10.0-11.0

Introduction

This data review covers 10 soil samples, 5 sediment samples, and one water sample listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8082 for Polychlorinated Biphenyls.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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.

Sample EB02-SA5B-121410 was identified as an equipment blank. No polychlorinated biphenyl 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 with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-002-SA5C-SB-4.0-5.0	Not specified	Decachlorobiphenyl	121 (45-120)	All TCL compounds	J (all detects)	P
SED-024-SIV-SD-0.0-0.5	Not specified	Decachlorobiphenyl	142 (45-120)	All TCL compounds	J (all detects)	P
SED-023-SIV-SD-0.0-0.5	Not specified	Decachlorobiphenyl	132 (45-120)	All TCL compounds	J (all detects)	P
SL-125-SA5B-SS-0.0-0.5	Not specified	Decachlorobiphenyl	127 (45-120)	All TCL compounds	J (all detects)	P
SL-126-SA5B-SS-0.0-0.5	Not specified	Decachlorobiphenyl	151 (45-120)	All TCL compounds	J (all detects)	P
SED-027-SIV-SD-0.0-0.5	Not specified	Decachlorobiphenyl	155 (45-120)	All TCL compounds	J (all detects)	P
SED-026-SIV-SD-0.0-0.5	Not specified	Decachlorobiphenyl Tetrachloro-m-xylene	185 (45-120) 195 (53-139)	All TCL compounds	J (all detects)	P
SL-060-SA5C-SB-10.0-11.0	Not specified	Decachlorobiphenyl	151 (45-120)	All TCL compounds	J (all 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) 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
LCS/D water (All water samples in SDG DE039)	Aroclor 5442	58 (75-125)	56 (75-125)	-	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects) UJ (all non-detects)	P
LCS/D soil (All soil and sediment samples in SDG DE039)	Aroclor 5442	58 (75-125)	55 (75-125)	-	Aroclor 5432 Aroclor 5442 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
SED-024-SIV-SD-0.0-0.5	PCB-1254 PCB-1260	77.02 46.31	J (all detects) J (all detects)	A
SED-023-SIV-SD-0.0-0.5	PCB-1254 PCB-1260	77.34 58.29	J (all detects) J (all detects)	A
SL-125-SA5B-SS-0.0-0.5	PCB-1254	56.93	J (all detects)	A
SL-126-SA5B-SS-0.0-0.5	PCB-1260	74.88	J (all detects)	A
SED-027-SIV-SD-0.0-0.5	PCB-1254	48.24	J (all detects)	A
SED-026-SIV-SD-0.0-0.5	PCB-1254	54.02	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE039	EB02-SA5B-121410 SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SL-060-SA5C-SB-10.0-11.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Aroclor 5432 Aroclor 5442 Aroclor 5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE039	SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5	PCB-1254 PCB-1260	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	SL-125-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	PCB-1254	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	SL-126-SA5B-SS-0.0-0.5	PCB-1260	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J3b **VALIDATION COMPLETENESS WORKSHEET** Date: 5/11/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/14/10
II.	GC/ECD Instrument Performance Check	NA	
III.	Initial calibration	A	%D PSD ≤ 20
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	SW	LCS ID
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	ND	EB = 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, Sediment, water

1	SL-002-SA5C-SB-4.0-5.0 Soil	11	SL-126-SA5B-SS-0.0-0.5 S	21	PBLK19354	31	
2	SL-002-SA5C-SB-9.0-10.0	12	SL-129-SA5B-SS-0.0-0.5	22	PBLK17350	32	
3	EB02-SA5B-121410 W	13	SL-128-SA5B-SS-0.0-0.5	23		33	
4	SL-004-SA5C-SB-9.0-10.0 S	14	SED-027-SIV-SD-0.0-0.5 Sed	24		34	
5	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	15	SED-026-SIV-SD-0.0-0.5	25		35	
6	SL-140-SA5C-SB-3.0-4.0	16	SL-060-SA5C-SB-10.0-11.0	26		36	
7	SED-024-SIV-SD-0.0-0.5 Sed	17		27		37	
8	SED-023-SIV-SD-0.0-0.5	18		28		38	
9	SED-022-SIV-SD-0.0-0.5	19		29		39	
10	SL-125-SA5B-SS-0.0-0.5 S	20		30		40	

Notes: _____

LDC #: 25337136
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FR
2nd Reviewer: A

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: JS 33713b
SDG #: all cancel

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 25337J35

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC ___ HPLC

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	1	NS	θ	121 (45-120)	J/Pdet (S)
	7	↓	↓	142 ( )	
	8		θ	132 ( )	
	10		θ	127 (↓)	
	9		Y	50 (53-139)	no qual 50x DL
	11		θ	151 (45-120)	J/Pdet (S)
	12		↓	129 (↓)	no qual 10x DL
	14		↓	155 ( )	J/Pdet (S)
	15		↓	185 ( )	
				195 (53-139)	
	16	↓	↓	151 (↓)	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25337J3b

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y N N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

Y N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS/D soil water	Aroclor 5442	58 (75-125)	56 (75-125)	( )	All water	J/UJ/P (L)
			( )	( )	( )		
			( )	( )	( )		(Qual 5438 5442 5460)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
	LCS/D soil	↓	58 (↓)	55 (↓)	( )	All soil & sed	J/UJ/P (L)
			( )	( )	( )		
			( )	( )	( )		(Qual 5438, 5442, 5460)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25337J3b

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet. 2 columns Finding ≤ 40	Associated Samples	Qualifications
	PCB - 1254	77.02	7	J/A det (* x 111)
	PCB - 1260	46.31		↓
	↓	77.34	8	
		58.29		
			FD	
	PCB - 1254	56.93	10	
	PCB - 1260	74.88	11	
	PCB - 1254	48.24	14	
	PCB - 1254	54.02	15	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25337J3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20 std)	Recalculated CF (20 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/8/10	Anochlor 1260-1 (ZBR1)	83	83	82	82	9.5	9.5
			↓ (ZBR2)	186	186	181	181	9.2	9.2
2	ICAL	12/28/10	↓	70	70	68	68	6.6	6.6
				170	170	164	164	5.7	5.7
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.

INICIAL SB

LDC #: 25337136
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 4:05	12/22/10	Aroclor 1260 (ZBR1)	200	195.47	195.47	2-3	2.3
			↓ (ZBR2)	↓	214.96	214.96	7.5	7.5
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 #: 25337J55
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
TCMX	ZB RI	1.04	1.154022	111	111	0
DCB	↓	↓	1.24452	121	120	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 #: 25337J3b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: Lab ID 8012L

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Aroclor 5442	16.67	16.67	9.6	9.2	58	58	55	55	4	4

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 #: 25337J3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #4 Compound Name Aroclor 1254

Concentration = $\frac{0.5458}{0.832}$

= 0.66 ug/kg

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications
	Aroclor 1254-2	1911 / 30189	.6656 = X / 200	X = 12.66	
					Aroclor 1254-2 = 0.422
		↓ = $\frac{12.66}{(60)(1000)}$	(2000) = 0.422		3 = 0.710
					4 = 0.316
					5 = 0.436
					6 = 0.845
					Ave = 0.5458

Comments: [illegible]

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 12, 2011
Matrix:	Soil/Sediment/Water
Parameters:	Metals
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5
SL-060-SA5C-SB-10.0-11.0
SL-002-SA5C-SB-4.0-5.0MS
SL-002-SA5C-SB-4.0-5.0MSD
SL-002-SA5C-SB-4.0-5.0DUP

Introduction

This data review covers 13 soil samples, 5 sediment 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, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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)	Cadmium Copper Lead Phosphorus Potassium Thallium Tin Vanadium	0.077 mg/Kg 0.070 mg/Kg 0.018 mg/Kg 1.509 mg/Kg 31.276 mg/Kg 0.041 mg/Kg 1.407 mg/Kg 0.051 mg/Kg	All soil and sediment samples in SDG DE039
ICB/CCB	Antimony Beryllium	0.31 ug/L 0.13 ug/L	All soil and sediment samples in SDG DE039
ICB/CCB	Potassium Magnesium Titanium	334 ug/L 41.0 ug/L 0.67 ug/L	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0

Method Blank ID	Analyte	Maximum Concentration	Associated Samples
ICB/CCB	Potassium Titanium	353.0 ug/L 0.72 ug/L	SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0
ICB/CCB	Copper	0.24 ug/L	SL-002-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5
ICB/CCB	Copper	0.22 ug/L	SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0
PB (prep blank)	Calcium Magnesium Titanium	96.010 ug/L 42.140 ug/L 0.22 ug/L	All water samples in SDG DE039
ICB/CCB	Aluminum Antimony Beryllium Calcium Magnesium Mercury	87.0 ug/L 0.33 ug/L 0.080 ug/L 114 ug/L 85.7 ug/L 0.021 ug/L	All water samples in SDG DE039

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-002-SA5C-SB-4.0-5.0	Antimony Cadmium Tin	0.16 mg/Kg 0.089 mg/Kg 2.8 mg/Kg	0.16U mg/Kg 0.089U mg/Kg 2.8U mg/Kg
SL-002-SA5C-SB-9.0-10.0	Tin	3.0 mg/Kg	3.0U mg/Kg

Sample	Analyte	Reported Concentration	Modified Final Concentration
SL-004-SA5C-SB-9.0-10.0	Tin	2.8 mg/Kg	2.8U mg/Kg
SL-004-SA5C-SB-4.0-5.0	Cadmium Tin	0.24 mg/Kg 2.5 mg/Kg	0.24U mg/Kg 2.5U mg/Kg
SL-140-SA5C-SB-3.0-4.0	Antimony Cadmium Tin	0.17 mg/Kg 0.053 mg/Kg 2.6 mg/Kg	0.17U mg/Kg 0.053U mg/Kg 2.6U mg/Kg
SED-024-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.19 mg/Kg 0.25 mg/Kg 2.7 mg/Kg	0.19U mg/Kg 0.25U mg/Kg 2.7U mg/Kg
SED-023-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.24 mg/Kg 0.22 mg/Kg 2.4 mg/Kg	0.24U mg/Kg 0.22U mg/Kg 2.4U mg/Kg
SED-022-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.25 mg/Kg 0.36 mg/Kg 2.3 mg/Kg	0.25U mg/Kg 0.36U mg/Kg 2.3U mg/Kg
SL-125-SA5B-SS-0.0-0.5	Tin	3.0 mg/Kg	3.0U mg/Kg
SL-126-SA5B-SS-0.0-0.5	Tin	2.9 mg/Kg	2.9U mg/Kg
SL-129-SA5B-SS-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SL-128-SA5B-SS-0.0-0.5	Antimony Cadmium Tin	0.23 mg/Kg 0.31 mg/Kg 3.1 mg/Kg	0.23U mg/Kg 0.31U mg/Kg 3.1U mg/Kg
SED-027-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.16 mg/Kg 0.26 mg/Kg 2.6 mg/Kg	0.16U mg/Kg 0.26U mg/Kg 2.6U mg/Kg
SED-026-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.13 mg/Kg 0.26 mg/Kg 3.0 mg/Kg	0.13U mg/Kg 0.26U mg/Kg 3.0U mg/Kg
SL-060-SA5C-SB-10.0-11.0	Cadmium Tin	0.22 mg/Kg 2.9 mg/Kg	0.22U mg/Kg 2.9U mg/Kg

Sample EB02-SA5B-121410 was identified as an equipment blank. No metal contaminants were found in this blank with the following exceptions:

Equipment Blank ID	Sampling Date	Analyte	Concentration	Associated Samples
EB02-SA5B-121410	12/14/10	Iron Lead Molybdenum	53.3 ug/L 0.075 ug/L 0.32 ug/L	SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5

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.

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-002-SA5C-SB-4.0-5.0MS/MSD (All soil and sediment samples in SDG DE039)	Arsenic	292 (75-125)	228 (75-125)	-	J (all detects)	A
	Beryllium	197 (75-125)	149 (75-125)	-	J (all detects)	
	Cadmium	169 (75-125)	171 (75-125)	-	J (all detects)	
	Chromium	211 (75-125)	194 (75-125)	-	J (all detects)	
	Cobalt	149 (75-125)	143 (75-125)	-	J (all detects)	
	Copper	159 (75-125)	157 (75-125)	-	J (all detects)	
	Lead	257 (75-125)	229 (75-125)	-	J (all detects)	
	Molybdenum	175 (75-125)	165 (75-125)	-	J (all detects)	
	Nickel	172 (75-125)	164 (75-125)	-	J (all detects)	
	Potassium	139 (75-125)	-	-	J (all detects)	
	Silver	173 (75-125)	162 (75-125)	-	J (all detects)	
	Thallium	225 (75-125)	203 (75-125)	-	J (all detects)	
	Vanadium	264 (75-125)	249 (75-125)	-	J (all detects)	
SL-002-SA5C-SB-4.0-5.0MS/MSD (All soil and sediment samples in SDG DE039)	Phosphorus	-	66 (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 with the following exceptions:

DUP ID (Associated Samples)	Analyte	RPD (Limits)	Difference (Limits)	Flag	A or P
SL-002-SA5C-SB-4.0-5.0DUP (All soil and sediment samples in SDG DE039)	Arsenic Barium Chromium Copper Lead Nickel Vanadium Zinc	29 (≤20) 33 (≤20) 28 (≤20) 27 (≤20) 28 (≤20) 26 (≤20) 27 (≤20) 30 (≤20)	- - - - - - - -	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) and relative percent differences (RPD) were within QC limits.

IX. Internal Standards

All internal standard percent recoveries (%R) were within QC limits.

X. Furnace Atomic Absorption QC

Graphite furnace atomic absorption was not utilized in this SDG.

XI. ICP Serial Dilution

ICP serial dilution analysis was performed by the laboratory. The analysis criteria were met with the following exceptions:

Diluted Sample	Analyte	%D (Limits)	Associated Samples	Flag	A or P
SL-002-SA5C-SB-4.0-5.0	Barium Lead Lithium Potassium Zinc	13 (≤10) 17 (≤10) 14 (≤10) 12 (≤10) 16 (≤10)	All soil and sediment samples in SDG DE039	J (all detects) UJ (all non-detects)	A

XII. Sample Result Verification

All sample result verifications were acceptable.

All metals reported below the RL and above the MDL were qualified as follows:

Sample	Analyte	Flag	A or P
All samples in SDG DE039	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 DE039

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	Arsenic Beryllium Cadmium Chromium Cobalt Copper Lead Molybdenum Nickel Potassium Silver Thallium Vanadium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	Phosphorus	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	Arsenic Barium Chromium Copper Lead Nickel Vanadium Zinc	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	Barium Lead Lithium Potassium Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	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 DE039

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE039	SL-002-SA5C-SB-4.0-5.0	Antimony Cadmium Tin	0.16U mg/Kg 0.089U mg/Kg 2.8U mg/Kg	A	B
DE039	SL-002-SA5C-SB-9.0-10.0	Tin	3.0U mg/Kg	A	B
DE039	SL-004-SA5C-SB-9.0-10.0	Tin	2.8U mg/Kg	A	B
DE039	SL-004-SA5C-SB-4.0-5.0	Cadmium Tin	0.24U mg/Kg 2.5U mg/Kg	A	B
DE039	SL-140-SA5C-SB-3.0-4.0	Antimony Cadmium Tin	0.17U mg/Kg 0.053U mg/Kg 2.6U mg/Kg	A	B

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE039	SED-024-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.19U mg/Kg 0.25U mg/Kg 2.7U mg/Kg	A	B
DE039	SED-023-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.24U mg/Kg 0.22U mg/Kg 2.4U mg/Kg	A	B
DE039	SED-022-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.25U mg/Kg 0.36U mg/Kg 2.3U mg/Kg	A	B
DE039	SL-125-SA5B-SS-0.0-0.5	Tin	3.0U mg/Kg	A	B
DE039	SL-126-SA5B-SS-0.0-0.5	Tin	2.9U mg/Kg	A	B
DE039	SL-129-SA5B-SS-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE039	SL-128-SA5B-SS-0.0-0.5	Antimony Cadmium Tin	0.23U mg/Kg 0.31U mg/Kg 3.1U mg/Kg	A	B
DE039	SED-027-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.16U mg/Kg 0.26U mg/Kg 2.6U mg/Kg	A	B
DE039	SED-026-SIV-SD-0.0-0.5	Antimony Cadmium Tin	0.13U mg/Kg 0.26U mg/Kg 3.0U mg/Kg	A	B
DE039	SL-060-SA5C-SB-10.0-11.0	Cadmium Tin	0.22U mg/Kg 2.9U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J4 **VALIDATION COMPLETENESS WORKSHEET** Date: 5-2-11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 12/14/10
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS/D
IX.	Internal Standard (ICP-MS)	A	
X.	Furnace Atomic Absorption QC	N	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	SW	EB=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: ~~sediment~~/soil/water

1	SL-002-SA5C-SB-4.0-5.0 Soil	11	SL-126-SA5B-SS-0.0-0.5 S	21		31	PBW
2	SL-002-SA5C-SB-9.0-10.0	12	SL-129-SA5B-SS-0.0-0.5	22		32	PBS
3	EB02-SA5B-121410 W	13	SL-128-SA5B-SS-0.0-0.5	23		33	
4	SL-004-SA5C-SB-9.0-10.0 Soil	14	SED-027-SIV-SD-0.0-0.5	24		34	
5	SL-004-SA5C-SB-4.0-5.0	15	SED-026-SIV-SD-0.0-0.5	25		35	
6	SL-140-SA5C-SB-3.0-4.0	16	SL-060-SA5C-SB-10.0-11.0	26		36	
7	SED-024-SIV-SD-0.0-0.5	17	(#1) MS	27		37	
8	SED-023-SIV-SD-0.0-0.5	18	MSD	28		38	
9	SED-022-SIV-SD-0.0-0.5	19	DUP	29		39	
10	SL-125-SA5B-SS-0.0-0.5	20		30		40	

Notes: _____

LDC #: 25337J4

VALIDATION FINDINGS CHECKLIST

Reviewer: CB
2nd Reviewer: TN

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 #: 25337J4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Reviewer: CR
2nd reviewer: [signature]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-16		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 17-19		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25337J4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x x (ICP: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: All Soil [illegible]

				Sample Identification														
Analyte	Maximum PB[a] (mg/Kg)	Maximum ICB/CCB[a] (ug/l)	Blank Action Limit	1	2	4	5	6	7	8	9	10	11	12	13	14	15	16
Sb		0.31	0.31	0.16				0.17	0.19	0.24	0.25				0.23	0.16	0.13	
Be		0.13	0.13															
Cd	0.077		0.385	0.089			0.24	0.053	0.25	0.22	0.36				0.31	0.26	0.26	0.22
Cu	0.070		0.35															
Pb	0.018		0.09															
P	1.509		7.545															
K	31.276		156.38															
Tl	0.041		0.205															
Sn	1.407		7.035	2.8	3.0	2.8	2.5	2.6	2.7	2.4	2.3	3.0	2.9	2.6	3.1	2.6	3.0	2.9
V	0.051		0.255															

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 2

					Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Blank Action Limit	No Qualifiers (>5x)										
K			334	167											
Mg			41.0	20.5											
Ti			0.67	0.335											

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 4-16

					Sample Identification										
Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/l)	Maximum ICB/CCB[a] (ug/l)	Blank Action Limit	No Qualifiers (>5x)										
K			353.0	176.5											
Ti			0.72	0.36											

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

METHOD: Trace Metals (EPA SW 846 Method 6020/7000) Soil preparation factor applied: 100x x (ICP: 2xdil)
Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 1, 6-14

					Sample Identification									
Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	No Qualifiers (>5x)									
Cu			0.24	0.24										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2, 4, 5, 15, 16

					Sample Identification									
Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	No Qualifiers (>5x)									
Cu			0.22	0.22										

Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Water

					Sample Identification									
Analyte	Maximum PB[a] ~~(mg/Kg)~~ (ug/L)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Blank Action Limit	No Qualifiers (ND)									
Al			87.0	435										
Sb			0.33	1.65										
Be			0.080	0.4										
Ca	96.010		114	570										
Mg	42.140		85.7	428.5										
Hg			0.021	0.105										
Ti	0.22			1.1										

Note : a - The listed analyte concentration is the highest ICB, CCB, or PB detected in the analysis of each element.

LDC #: 25337J4

VALIDATION FINDINGS WORKSHEET
Field Blanks

Reviewer: AR
2nd Reviewer: W

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:** 100x
Sampling date: 12/14/10 Soil factor applied mg/Kg
Field blank type: (circle one) Field Blank / Rinsate / Other: _____ Associated Samples: ~~All Soil~~ 10 - 13

Analyte	Blank ID	Sample Identification										
	3	Action Level	No Qualifiers (>5x)									
Fe	53.3	26.65										
Pb	0.075	0.0375										
Mo	0.32	0.16										

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 #: 25333J4

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	Finding (ug/L)	Associated Samples	Qualifications
	12/22/10	ICSA (18:22)	Mn	4.0 (≤0.78)	All Soil + Sed	No Qual (>10x)
	12/22/10	ICSA (20:21)	Mn	4.0	↓	↓
	12/22/10	ICSA (23:43)	Mn	4.0 (≤0.84)	All Water	No Qual (< 90% interferents)
	12/23/10	ICSA (00:45)	Mn	4.0	↓	↓

Comments:

LDC #: 25335J4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

Y (N) N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	17/18	S	As	292	228		All Soil samples	J det/A (Q)
			Be	197	149			
			Cd	169	171			
			Cr	211	194			
			Co	149	143			
			Cu	159	157			
			Pb	257	229			
			Mo	175	165			
			Ni	172	164			
			P		66			J/UJ/A
			K	139				J det/A
			Ag	173	162			
			Tl	225	203			
			V	264	249			

Comments: _____

LDC #: 25333J4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
Reviewer: QR
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 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
		19	S	As	29 (≤20)		All Soil + Sed	J/UJ/A (E)
				Ba	33			
				Cr	28			
				Cu	29			
				Pb	28			
				Ni	26			
				V	27			
				Zn	30			

Comments:

DUP.4SW

LDC #: 25337J4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

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 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
		~~17/18~~02 1	S	~~As~~ Ba	13	All Soil + Sed	J/UJ/A (A)
				Pb	17	↓	
				Li	14		
				K	12		
				Zn	16		

Comments:

LDC #: 25337J4

VALIDATION FINDINGS WORKSHEET
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: CS
2nd Reviewer: [signature]

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)	B	579.06	600	96.5	96.5	Y
ICV	ICP/MS (Initial calibration)	Cd	49.34	50	98.7	98.7	
ICV	CVAA (Initial calibration)	Hg	2.45	2.5	98.0	98.0	
CCV	ICP (Continuing calibration)	Sr	500.69	500	100.1	100.1	
CCV	ICP/MS (Continuing calibration)	Ag	25.09	25	100.4	100.4	
CCV	CVAA (Continuing calibration)	Hg	1.0	1.0	100.0	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 #: 25337J4

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
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	20.4	20	102.0	102.0	Y
LCS	Laboratory control sample	Ni	96.8	104.8	108	108	
17	Matrix spike	As	(SSR-SR) 1.2261	1.2301	100	100	
19	Duplicate	Mn	314.5718	278.0081	12	12	
1	ICP serial dilution	V	139.8	126.35	10	10	

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 #: 25331J4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 3
Reviewer: AC
2nd reviewer: [illegible]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for Mn 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:

$$\frac{100\,mL\,(2.98019\,mg/L)}{0.938\,(1.01g)} = 314.57\,mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	Al	12500	12500	Y
		Sb	0.16	0.16	
		As	5.6	5.6	
		Ba	63.6	63.6	
		Be	0.53	0.53	
		B	3.0	3.0	
		Cd	0.089	0.089	
		Ca	3200	3200	
		Cr	14.1	14.1	
		Co	5.6	5.6	
		Cu	5.8	5.8	
		Fe	19800	19800	
		Pb	4.7	4.7	
		Li	22.8	22.8	
		Mg	3970	3970	
		Mn	315	315	
		Mo	0.47	0.47	
		Ni	8.5	8.5	
		P	330	330	
		K	2520	2520	

Note: _____

LDC #: 25337J4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 2 of 3
Reviewer: 02
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 Be 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:

$$\frac{100mL(2)(4.1\mu g/L)}{0.953(1.01g)(1000)} = 0.85 mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1 (cont)	Se	0.10	0.10	Y
		Ag	0.015	0.015	
		Na	95.4	95.4	
		Sr	12.3	12.3	
		Tl	0.36	0.36	
		Sn	2.8	2.8	
		Ti	1220	1220	
		V	29.5	29.5	
		Zn	59.4	59.4	
		~~Mo~~			
	11	Al	19800	19800	Y
		Sb	0.29	0.29	
		As	9.7	9.7	
		Ba	115	115	
		Be	0.85	0.85	
		B	2.4	2.4	
		Cd	0.39	0.39	
		Ca	3410	3410	
		Cr	34.5	34.5	
		Co	9.5	9.5	
		Cu	19.2	19.2	
		Fe	28000	28000	
		Pb	16.5	16.5	

LDC #: 25337J4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: CR
2nd reviewer: [illegible]

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

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Have results been reported and calculated correctly?
Y N N/A Are results within the calibrated range of the instruments and within the linear range of the ICP?
Y N N/A Are all detection limits below the CRDL?

Detected analyte results for _____ were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

Recalculation: See previous page

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	11 (cont)	Li	27.4	27.4	Y
		Mg	5250	5250	
		Mn	364	364	
		Hg	0.011	0.011	
		Mo	1.1	1.1	
		Ni	20.6	20.6	
		P	736	736	
		K	4480	4480	
		Se	0.17	0.17	
		Ag	0.34	0.34	
		Na	100	100	
		Sr	23.9	23.9	
		Tl	0.44	0.44	
		Sn	2.9	2.9	
		Ti	1490	1490	
		V	60.5	60.5	
		Zn	140	140	
		Zr	4.4	4.4	↓

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 11, 2011
Matrix:	Soil/Sediment/Water
Parameters:	Herbicides
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

EB02-SA5B-121410
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5

Introduction

This data review covers 4 soil samples, 5 sediment samples, and one water sample 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 with the following exceptions:

Date	Column	Compound	r^2	Associated Samples	Flag	A or P
12/23/10	RTXCLPI	Dalapon	0.9803	All soil and sediment samples in SDG DE039	J (all detects) UJ (all non-detects)	A

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 with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/19/10	2H18351.13.CCV	RTXCLP1	Dalapon 2,4-DP Dinoseb	26.1 28.9 22.5	All water samples in SDG DE039	J (all detects) UJ (all non-detects)	A
12/29/10	2H18357.60.CCV	RTXCLP1	Dalapon MCPA Dinoseb	22.7 28.3 34.2	SED-024-SIV-SD-0.0-0.5 PBLK25357	J (all detects) UJ (all non-detects)	A
12/29/10	2H18357.60.CCV	RTXCLP1	2,4,5-TP	23.1	PBLK25357	J (all detects) UJ (all non-detects)	A
12/29/10	2H18357.60.CCV	RTXCLP2	Dinoseb	20.3	SED-024-SIV-SD-0.0-0.5 PBLK25357	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/29/10	2H18357.72.CCV	RTXCLP1	Dalapon MCPA Dinoseb	28.8 35.1 33.7	SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	A
12/29/10	2H18357.72.CCV	RTXCLP2	Dinoseb	21.3	SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	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 with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
12/17/10	ICHBXFX-ICV	RTXCLP2	Dalapon 2,4,5-TP	34.4 20.3	All water samples in SDG DE039	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A

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.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SED-022-SIV-SD-0.0-0.5	Not specified	Dichlorophenyl acetic acid	231 (36-156)	All TCL compounds	J (all detects)	A
SL-125-SA5B-SS-0.0-0.5	Not specified	Dichlorophenyl acetic acid	178 (36-156)	All TCL compounds	J (all detects)	A

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SL-126-SA5B-SS-0.0-0.5	Not specified	Dichlorophenyl acetic acid	157 (36-156)	All TCL compounds	J (all detects)	A
SL-129-SA5B-SS-0.0-0.5	Not specified	Dichlorophenyl acetic acid	193 (36-156)	All TCL compounds	J (all detects)	A
SL-128-SA5B-SS-0.0-0.5	Not specified	Dichlorophenyl acetic acid	162 (36-156)	All TCL compounds	J (all detects)	A
SED-026-SIV-SD-0.0-0.5	Not specified	Dichlorophenyl acetic acid	377 (36-156)	All TCL compounds	J (all detects)	A

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) and relative percent differences (RPD) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCSsoil	2,4-D	144 (40-140)	All soil and sediment samples in SDG DE039	J (all detects)	P
LCSsoil	Dinoseb	8 (10-36)	All soil and sediment samples in SDG DE039	J (all detects) R (all non-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.

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
SED-022-SIV-SD-0.0-0.5	2,4,5-T	44.79	J (all detects) J (all detects)	A
SL-128-SA5B-SS-0.0-0.5	Dicamba	126.30	J (all detects)	A
SED-026-SIV-SD-0.0-0.5	Dicamba	104.24	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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Dalapon	J (all detects) UJ (all non-detects)	A	Initial calibration (r^2)(C)
DE039	EB02-SA5B-121410	Dalapon 2,4-DP Dinoseb	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE039	SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Dalapon MCPA Dinoseb	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE039	EB02-SA5B-121410	Dalapon 2,4,5-TP	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE039	SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-026-SIV-SD-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE039	SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	2,4-D	J (all detects)	P	Laboratory control samples (%R) (L)
DE039	SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Dinoseb	J (all detects) R (all non-detects)	P	Laboratory control samples (%R) (L)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SED-022-SIV-SD-0.0-0.5	2,4,5-T	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE039	SL-128-SA5B-SS-0.0-0.5 SED-026-SIV-SD-0.0-0.5	Dicamba	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE039	EB02-SA5B-121410 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J5 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EA
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: 12/14/10
II	Initial calibration	SW	%RSD ≤ 20, r^2
III.	Calibration verification/ICV	SW	%CCV/ICV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	SW	
VI.	Matrix spike/Matrix spike duplicates	N	client specific
VII.	Laboratory control samples	SW	LCS ID
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	NP	EB = 1

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: soils, sediments, water

1 1	EB02-SA5B-121410	11 1	~~BLANKA~~	21		31	
2 2	SED-024-SIV-SD-0.0-0.5	12 1	PBLK36350	22		32	
3	SED-023-SIV-SD-0.0-0.5	13 2	PBLK25357	23		33	
4	SED-022-SIV-SD-0.0-0.5	14		24		34	
5	SL-125-SA5B-SS-0.0-0.5	15		25		35	
6	SL-126-SA5B-SS-0.0-0.5	16		26		36	
7	SL-129-SA5B-SS-0.0-0.5	17		27		37	
8	SL-128-SA5B-SS-0.0-0.5	18		28		38	
9	SED-027-SIV-SD-0.0-0.5	19		29		39	
10	SED-026-SIV-SD-0.0-0.5	20		30		40	

Notes:

LDC #: 25337J5
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer:

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓	✓		
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?		✓		
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?	✓			
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25 33705
SDG #: all cond

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

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 #: 25337J5
SDG #: see cover

METHOD: __GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Initial Calibration

Reviewer: EJ
2nd Reviewer: A

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 RPD Limit ≤20%	Associated Samples	Qualifications
	12/23/10	1H18357ICAL	RTXCLP1	H	r^2 = 0.9803 (≥ 0.990)	All soil & sed	J/UJ/A C

Comments _____

LDC #: 53375J5

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC __ HPLC

2nd Reviewer:

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies? 20
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤15.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ 15.0) 20	RT (limit)	Associated Samples	Qualifications
	12/17/10	1CHBX FX-1CV	RTXCLP2	H	34.4	( )	all water	J/UJ/A (C)
				D	20.3	( )	↓	↓
						( )		
						( )		
	12/19/10	2H18351.13.CCV	RTXCLP1	H	26.1	( )		(C)
				2,4-DP	28.9	( )		
				E	22.5	( )	↓	↓
						( )		
						( )		
	12/29/10	2H18357.60.CCV	RTXCLP1	H	22.7	( )	PBLK25357, 2	J/UJ/A (C)
				J	28.3	( )	↓	
✓				D	23.1	( )	PBLK25357	
				E	34.2	( )	PBLK25357, 2	↓
						( )		
	12/29/10	↓	RTXCLP2	E	20.3	( )	PBLK25357, 2	J/UJ/A (C)
						( )		
						( )		
	12/29/10	2H18357.72.CCV	RTXCLP1	H	28.8	( )	3 → 10	J/UJ/A (C)
				J	35.1	( )		
				E	33.7	( )	↓	↓
	12/29/10	↓	RTXCLP2	E	21.3	( )		
						( )		
						( )		
						( )		

LDC #: 25337J5

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	4	NS	* Q	231 (36-156)	J/A dut (S)
	5			178 ( )	↓ (S)
	6			157 ( )	↓ (S)
	7			193 ( )	↓ (S)
	8			162 ( )	↓ (S)
	10	↓	↓	377 ( )	↓ (S)
	*2,4			( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25337J5

VALIDATION FINDINGS WORKSHEET

Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a laboratory control samples (LCS) and laboratory control sample duplicate (LCSD) analyzed for each matrix in this SDG?

Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

[✓ Y] N N/A Was an LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS soil	A	144 (40-140)	( )	( )	All soil + sed	J/Pdet (L)
		E	8 (10-36)	( )	( )	↓	J/R/P (L)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25337J5

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Between 2 columns Finding ±40	Associated Samples	Qualifications
	DN C	44.79	4	J/A det (*1X)
	G	126.30	8	↓ ↓
	G	104.24	10	↓ ↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25337J5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 2
Reviewer: FP
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20.020/19.8 std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL #8456A 1H15357	12/23/10	Dicamba RTXcLP	4.94×10^{-1}	4.94×10^{-1}	4.89×10^{-1}	4.89×10^{-1}	6.3	6.3
			2,4,5-TP ↓	7.43×10^{-1}	7.43×10^{-1}	7.03×10^{-1}	7.03×10^{-1}	3.8	3.8
2			↓ RTXcLP2	5.55×10^{-1}	5.55×10^{-1}	5.43×10^{-1}	5.43×10^{-1}	9.9	9.9
			↓	7.54×10^{-1}	7.54×10^{-1}	7.17×10^{-1}	7.17×10^{-1}	4.9	4.9
3	ICAL HP2231A 1H18357	12/23/10	↓	5.76×10^{-1}	5.76×10^{-1}	5.91×10^{-1}	5.91×10^{-1}	17.5	17.5
			↓	7.55×10^{-1}	7.55×10^{-1}	7.29×10^{-1}	7.29×10^{-1}	14.7	14.7
4			↓	4.87×10^{-1}	4.87×10^{-1}	4.81×10^{-1}	4.81×10^{-1}	3.8	3.8
			↓	7.21×10^{-1}	7.21×10^{-1}	6.83×10^{-1}	6.83×10^{-1}	3.4	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 #: 25337J5
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer:
2nd Reviewer:

METHOD: GC ( ) HPLC ( )

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (20.020 / 19.8 std)	Recalculated CF (→ std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL HP23IA IH1835]	2/17/10	Dicamba RTXCLP1	5.42×10^{-1}	5.42×10^{-1}	5.55×10^{-1}	5.55×10^{-1}	12.1	12.1
			2,4,5-TP	6.93×10^{-1}	6.93×10^{-1}	6.91×10^{-1}	6.91×10^{-1}	14.9	14.9
2			↓ RTXCLP2	4.81×10^{-1}	4.81×10^{-1}	4.86×10^{-1}	4.86×10^{-1}	9.3	9.3
				7.04×10^{-1}	7.04×10^{-1}	6.80×10^{-1}	6.80×10^{-1}	2.3	2.3
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 #: 25337J5
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	2H18351.13	12/19/10	Dicamba RTXclP1	40.04	38.37	38.37	4.2	4.2
			2,4,5-TP	39.60	36.79	36.79	7.1	7.1
			RTXclP2		38.98	38.98	2.6	2.6
2			↓	↓	40.46	40.46	2.2	2.2
	2H18357.60	12/29/10	RTXclP1		40.40	40.40	0.9	0.9
			↓	↓	30.46	30.46	23.1	23.1
3			RTXclP2		39.25	39.25	2.0	2.0
			↓	↓	36.61	36.61	7.5	7.5
	2H18357.72	12/29/10	RTXclP1		39.07	39.07	2.4	2.4
4			↓	↓	32.00	32.00	19.2	19.2
			RTXclP2		38.89	38.89	2.9	2.9
			↓	↓	36.80	36.80	7.1	7.1

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 #: 25335

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: ✓

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID:

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
#2	RTX-CLP I	6.66	8.52	128	128	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 #: 25337J5
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 8012

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	8.33	NA	12	NA	144	144				
Dinoseb (8151)	14.2	↓	1.2	↓	8	8	NA			
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 #: 25337J5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #2 Compound Name Dicamba

Concentration = $\frac{(10148)(100)(2000)}{(77751)(4.81 \times 10^{-1})(60)(0.872)(1000}$

1.037 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 14, 2010

LDC Report Date: June 23, 2011

Matrix: Soil/Sediment/Water

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-140-SA5C-SB-3.0-4.0
SED-024-SIV-SD-0.0-0.5
SED-023-SIV-SD-0.0-0.5
SED-022-SIV-SD-0.0-0.5
SL-125-SA5B-SS-0.0-0.5
SL-126-SA5B-SS-0.0-0.5
SL-129-SA5B-SS-0.0-0.5
SL-128-SA5B-SS-0.0-0.5
SED-027-SIV-SD-0.0-0.5
SED-026-SIV-SD-0.0-0.5
SL-060-SA5C-SB-10.0-11.0
SL-002-SA5C-SB-4.0-5.0MS
SL-002-SA5C-SB-4.0-5.0DUP
SL-129-SA5B-SS-0.0-0.5MS
SL-129-SA5B-SS-0.0-0.5DUP

Introduction

This data review covers 14 soil samples, 5 sediment 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 Fluoride and Nitrate as Nitrogen, 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 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.

Sample EB02-SA5B-121410 was identified as an equipment blank. No contaminant concentrations were found in this blank.

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-129-SA5B-SS-0.0-0.5MS (SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0)	Fluoride	65 (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 DE039	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 DE039

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE029	SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE029	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-140-SA5C-SB-3.0-4.0 SED-024-SIV-SD-0.0-0.5 SED-023-SIV-SD-0.0-0.5 SED-022-SIV-SD-0.0-0.5 SL-125-SA5B-SS-0.0-0.5 SL-126-SA5B-SS-0.0-0.5 SL-129-SA5B-SS-0.0-0.5 SL-128-SA5B-SS-0.0-0.5 SED-027-SIV-SD-0.0-0.5 SED-026-SIV-SD-0.0-0.5 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J6
SDG #: DE039
Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET
Level IV

Date: 5-7-11
Page: 1 of 1
Reviewer: QR
2nd Reviewer:

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 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	Sampling dates: 12/14/10
IIa.	Initial calibration	A	
IIb.	Calibration verification	A	
III.	Blanks	A	
IV	Matrix Spike/Matrix Spike Duplicates	~~A~~ 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	N	
X.	Field blanks	ND	EB=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: all Soil except 3=water

1	SL-002-SA5C-SB-4.0-5.0	11	SL-126-SA5B-SS-0.0-0.5	21		31	PBLW
2	SL-002-SA5C-SB-9.0-10.0	12	SL-129-SA5B-SS-0.0-0.5	22		32	PBS
3	EB02-SA5B-121410	13	SL-128-SA5B-SS-0.0-0.5	23		33	
4	SL-004-SA5C-SB-9.0-10.0	14	SED-027-SIV-SD-0.0-0.5	24		34	
5	SL-004-SA5C-SB-4.0-5.0	15	SED-026-SIV-SD-0.0-0.5	25		35	
6	SL-140-SA5C-SB-3.0-4.0	16	SL-060-SA5C-SB-10.0-11.0	26		36	
7	SED-024-SIV-SD-0.0-0.5	17	(#1) MS	27		37	
8	SED-023-SIV-SD-0.0-0.5	18	↓ DUP	28		38	
9	SED-022-SIV-SD-0.0-0.5	19	(#12) MS	29		39	
10	SL-125-SA5B-SS-0.0-0.5	20	↓ DUP	30		40	

Notes:

LDC #: 25335J6

VALIDATION FINDINGS CHECKLIST

Reviewer: CR
2nd Reviewer: VV

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 #: 25331J6

VALIDATION FINDINGS WORKSHEET
Sample Specific Analysis Reference

Page: 1 of 1
Reviewer:
2nd reviewer:

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1,2,4,5,16		[✓ pH] TDS Cl [✓ F] [✓ NO_3] NO_2 SO_4 PO_4 ALK [✓ CN^-] NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4]
3		pH TDS Cl [✓ F] NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4]
6-15		[✓ pH] TDS Cl [✓ F] NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4]
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
QC: 17,18		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 #: 25337J6
SDG #: -

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: CA
2nd Reviewer: [illegible]

METHOD: Inorganics, EPA Method Sr Conv

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. (80-120)

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
	19	So	F	65	-		12-16	J / UJ / A (Q)

Comments: _____

LDC #: 25335D6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Reviewer: CR
2nd Reviewer: [illegible]

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of ClO4 was recalculated. Calibration date: 12/6/10

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. (mg/l)	Response	Recalculated r or r^2	Reported r or r^2	Acceptable (Y/N)
Initial calibration	ClO4	s1	2	0.003	*1.000*	0.999	Y
		s2	4.00	0.01			
		s3	10.00	0.024			
		s4	25.00	0.063			
		s5	100.00	0.263			
Calibration verification	F	CCV	1,5	1,5115	101	101	
Calibration verification	NO3	↓	↓	1,4846	99	99	
Calibration verification	CN	↓	0,15	0,16090	107	107	↓

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 #: 25332J6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
2nd Reviewer: [illegible]

METHOD: Inorganics, Method See cover

Percent recoveries (%R) for a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

Sample ID	Type of Analysis	Element	Found / S (units) mg/kg	True / D (units) mg/kg	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	F	1.5	1.5	0	0	Y
17	Matrix spike sample	ClO_4	(SSR-SR) 522	495	105	105	J
18	Duplicate sample	NO_3	1.7	1.7	0	0	J

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 #: 25333156

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 / Cr^{6+} reported with a positive detect were recalculated and verified using the following equation:

Concentration =

F: $y = 0.2073x + 0.0021$

Recalculation: $x = F = \frac{0.05 - 0.0021}{0.2073} \times \frac{50\,mL}{5.08\,g\,(0.833)} = 2.7\,mg/kg$

Cr^{6+}: $y = 0.012749x - 0.00619$

$1{:}Cr^{6+} = \frac{((0.107341)78439158 - 0.4858)1000L}{1000(25g)(0.938)} = 0.338\,mg/kg$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
938	1	NO_3-N	1.8	1.8	Y
		Cr^{6+}	0.32	0.34	
		pH	8.45	8.45	
853	2	F	2.7	2.7	
		NO_3-N	1.1	1.1	
		Cr^{6+}	0.51	0.52	
		pH	7.77	7.77	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 14, 2010

LDC Report Date: May 10, 2011

Matrix: Soil/Water

Parameters: Total Petroleum Hydrocarbons as Gasoline

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
TB-121410
EB02-SA5B-121410
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0

Introduction

This data review covers 5 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-121410 was identified as a trip blank. No total petroleum hydrocarbons as gasoline contaminants were found in this blank.

Sample EB02-SA5B-121410 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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 TB-121410 EB02-SA5B-121410 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Gasoline - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J7 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: EF
2nd Reviewer: AV

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: 12/14/10
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	A	
XIII.	Field blanks	ND	TB = 3 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 2	SL-002-SA5C-SB-4.0-5.0	11 1	BLKKN	21		31	
2 2	SL-002-SA5C-SB-9.0-10.0	12	BLNKA	22		32	
3 1	TB-121410 W	13 2	BLNKB	23		33	
4 1	EB02-SA5B-121410 W	14		24		34	
5 2	SL-004-SA5C-SB-9.0-10.0	15		25		35	
6 2	SL-004-SA5C-SB-4.0-5.0 S.D	16		26		36	
7 2	SL-060-SA5C-SB-10.0-11.0	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25337J7
SDG #: all cancer

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337J7
SDG #: all cont

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?		✓		
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓	✓	
Target compounds were detected in the field duplicates.				
XV. Field blanks				
Field blanks were identified in this SDG.	✓			
Target compounds were detected in the field blanks.		✓		

LDC #: 25337J7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (220std)	Recalculated CF (220std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	11/29/10	GRO	35488	35488	37329	37329	12.7	12.7
				(5500)	(5500)				
2	ICAL	8/10/10	GRO	30949	30949	30328	30328	9.0	9.0
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 #: 25337J7
SDG #: fw conn

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 7
Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 13:22	12/15/10	GRO	220.00	201.96	201.96	8.2	8.2
	CCV 12:23	12/17/10	GRO	220.00	188.25	188.25	14.4	14.4
2								
	CCV 20:21	12/17/10	GRO	220.00	190.60	190.60	13.4	13.4
3	CCV 14:20	12/17/10	GRO	550.0	547.52	547.52	0.4	0.4
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 #: 25337J /
SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [signature]

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	
TFT	NS	735	669.23	91	91	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 #: 25337J7
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: vas/D

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)	11	11	8.7	8.6	79	79	78	78	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 #: 25337J7
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration = _____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 11, 2011
Matrix:	Soil
Parameters:	Total Petroleum Hydrocarbons as Extractables
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0

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 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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Total Petroleum Hydrocarbons as Extractables - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J8 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 12/14/10
II	Initial calibration	A	%D RSD ≤20
III.	Calibration verification/ICV	A	ICV/CCV ≤20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	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: SOIL

1	SL-002-SA5C-SB-4.0-5.0	11	PBLK06357	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	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 #: 25337J8
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.	✓			
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337J8
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25 337B
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [signature]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (288 std)	Recalculated CF (288 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/24/10	EFH C8-C40	13691	13691	14229	14229	4.6	4.6
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J8
SDG #: w cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	J358.36	12/27/10	EFH C8-C40	575.96	685.71	685.71	19.1	19.1
	J358.47	12/27/10	↓	287.98	293.33	293.33	1.9	1.9
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.

LDC #: 25 55 NJ

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: ✓

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: # 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
chlorobenzene	NJ	1.0	0.78974	79	79	0
orthoterphenyl	↓	1.0	0.88195	88	88	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 #: 25337J8
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: RD
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
EFH (C8-C11)	0.84	NA	0.63	NA	TS	TS	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J8
SDG #: JU seven

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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

METHOD: / GC __ HPLC

(Y) N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name TFH C30-C40

Concentration = $\frac{591570 \quad (1000)}{14229 \quad (60)(0.938(1000)}$

0.74 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:	December 14, 2010
LDC Report Date:	May 10, 2011
Matrix:	Soil
Parameters:	Explosives
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0

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 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 with the following exceptions:

Date	Column	Compound	%D	Associated Samples	Flag	A or P
12/14/10	Capcell CN	Tetryl	21.8	All samples in SDG DE039	J (all detects) UJ (all non-detects)	A

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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	Tetryl	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Explosives - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J40 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FD
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: 12/14/10
II	Initial calibration	A	%RSD ≤20 ✓2
III.	Calibration verification/ICV	SW	%D 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
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-002-SA5C-SB-4.0-5.0	11	PBLK19355	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	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 #: 25337J40
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FV
2nd Reviewer: A

Method: GC ✓ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337J4U
SDG #: all cont

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

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 #: 25337J4U

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: __ GC [✓ HPLC]

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

What type of continuing calibration calculation was performed? __%D or __RPD

[✓ Y] N N/A Were continuing calibration standards analyzed at the required frequencies?

Y [✓ N] N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ~~≤15.0%~~ 20?

Level IV Only

[✓ Y] N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ ~~15.0~~) 20	RT (limit)	Associated Samples	Qualifications
	12/14/10	ICV	Capcell CN	E	21.8	( )	All	J/UJ/A (C)
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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LDC #: 25337J40
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC_____HPLC ✓

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 507.0/499.5 CF (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/13/10	1,3- DNB (chrompack)	2.71×10^2	2.71×10^2	2.77×10^2	2.77×10^2	4.0	4.0
			Nitrobenzene	1.99×10^2	1.99×10^2	1.95×10^2	1.95×10^2	3.4	3.4
2			↓ (Capsell cN)	2.86×10^2	2.86×10^2	2.85×10^2	2.85×10^2	1.7	1.7
				1.67×10^2	1.67×10^2	1.73×10^2	1.73×10^2	11.5	11.5
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 #: 35337J4U
SDG #: fw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: JD

METHOD: GC_____HPLC ✓

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 20:08	12/23/10	1,3- DNB (chrompack)	501.00	494.55	494.55	2.5	2.5
			nitrobenzene	499.50	483.91	483.91	3.1	3.1
2	CCV 4:36	12/24/10	↓ (chrompack)	1014.00	983.91	983.91	3.0	3.0
			↓	999.0	975.99	975.99	2.3	2.3
3	CCV 20.08	12/23/10	↓ (capcell CN)	507	510.03	510.03	0.6	0.6
			↓	499.50	496.84	496.84	0.5	0.5
4	CCV 4:36	12/24/10	↓ (capcell CN)	1014.00	1029.51	1029.51	1.5	1.5
			↓	999.0	946.98	946.98	5.2	5.2

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 #: 43320TU
SDG #: see cover

METHOD: ___ GC ✓ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2-Nitro-m-xylene	chrompack	2500	2698.44	108	108	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 #: 25337J4U
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: RO
2nd Reviewer: SA

METHOD: __ GC ✓ HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)	2500.3	NA	2100	NA	83	83				
2,4,6-Trinitrotoluene (8330)	2499	↓	2700	↓	109	109	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J4U
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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

METHOD: ___ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 11, 2011
Matrix:	Soil
Parameters:	Terphenyls
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0

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 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.

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.

The QAPP reporting limits (RL) were met with the following exceptions:

Sample	Compound	Finding	Criteria	Flag	A or P
All samples in SDG DE039	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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	o-Terphenyl m-Terphenyl p-Terphenyl	None None None	P	Compound quantitation and CRQLs (*IX)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Terphenyls - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J41 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: TD
2nd Reviewer: AT

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: 12/14/10
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 specific
VII.	Laboratory control samples	A	LCS/D
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:

soil

1	SL-002-SA5C-SB-4.0-5.0	11	PBLK27355	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	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 #: 25337J41
SDG #: all water

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FD
2nd Reviewer: 1

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337J41
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: A

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓		✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337J4/

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding (Lab RL / QAPP RL)	Associated Samples	Qualifications
	m- Terphenyl	3.5 mg/kg / 0.167 mg/kg	All	nmo/p (* 1X)
	o- ↓	↓ / ↓	↓	↓
	p- ↓	↓ / ↓	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25337J4/
SDG #: per work

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (std)	Recalculated CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/22/10	o-Terphenyl	2.51 X10^4	2.51X10^4	2.52X10^4	2.52X10^4	1.3	1.3
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 #: 25337J4 /
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: F
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	R356.31	12/23/10	o-terphenyl	32.28	33.98	33.98	5.3	5.3
	R356.42	12/24/10	↓	32.28	33.55	33.55	3.9	3.9
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.

LDC #: 45 3511 1/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

METHOD: ✓ GC ___ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
n- Triacontane -d62	NS	0.333	0.322907	97	97	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 #: 25337J4/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

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

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS 10

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
m-Terphenyl	1.68		1.7	1.7	100	100	102	102	2	2

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 #: 25337Z4/
SDG #: all same

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 11, 2011
Matrix:	Soil
Parameters:	Alcohols
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0

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 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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Alcohols - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J43 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/11/11

SDG #: DE039 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: FI

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: 12/14/10
II	Initial calibration	A	%RSD ≤ 20
III.	Calibration verification/ICV	A	
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates	N	client specific
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-002-SA5C-SB-4.0-5.0	11	PBLK02354	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	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 #: 25 337J43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FT
2nd Reviewer: A

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337J43
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25 337J43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (500 std)	Recalculated CF (500 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/20/10	methanol	3.34	3.34	3.17	3.17	6.1	6.1
2									
3									
4									

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25332J43
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	CCV 21:09	12/20/10	Methanol	10,000	9791.62	9791.62	2.1	2.1
	CCV 23:50	12/20/10	Methanol	10000	94509.8	94509.8	5.5	5.5
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 #: 21551U45
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: MW #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Acetone	NS	2500	2350.707	94	94	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 #: 25 337J43
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 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.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Methane	2500	NA	1900	NA	78	78	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J43
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name methanol

Concentration = $\frac{745 \quad (5000)}{3.17 \quad (10)(0.938)(1000)}$

= 125.3 ug/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 14, 2010

LDC Report Date: May 13, 2011

Matrix: Soil

Parameters: Glycols

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0
SL-002-SA5C-SB-4.0-5.0MS
SL-002-SA5C-SB-4.0-5.0MSD

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 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.

The percent differences (%D) of the second source calibration standard were less than or equal to 20.0% for all compounds.

Retention times (RT) of all compounds in the calibration standards were within QC limits.

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No glycol contaminants were found in the method blanks.

No field blanks were identified in this SDG.

V. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

VI. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

Spike ID (Associated Samples)	Compound	MS (%R) (Limits)	MSD (%R) (Limits)	RPD (Limits)	Flag	A or P
SL-002-SA5C-SB-4.0-5.0MS/MSD (SL-002-SA5C-SB-4.0-5.0)	Diethylene glycol	-	-	36 (≤20)	J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID	Compound	%R (Limits)	Associated Samples	Flag	A or P
LCS	Propylene glycol	72 (75-125)	All samples in SDG DE039	J (all detects) UJ (all non-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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0	Diethylene glycol	J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	Propylene glycol	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R) (L)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Glycols - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J45 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC Glycols (EPA SW 846 Method 8015B)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/14/10
II	Initial calibration	A	%D 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	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: SOIL

1	SL-002-SA5C-SB-4.0-5.0	11	PBLK1035/	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	15		25		35	
6	#1 MS	16		26		36	
7	#1 MSD	17		27		37	
8		18		28		38	
9		19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25337J45
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FD
2nd Reviewer: CA

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25337145
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer: CA

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?			✓	
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337J45

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: 1

METHOD: ✓ GC ___ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?
[✓ Y] N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?
Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	6+7	Diethylene glycol	( )	( )	36 (20)	1	J/Adet (Q)
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25337J45

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer: c1

METHOD: GC/MS VOA (EPA SW 846 Method 8260)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Was a LCS required?
Y [✓ N] N/A Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS	Propylene glycol	72 (75-125)	( )	( )	all	J/UJ/P (L)
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25337J45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 100.847 CF (std)	Recalculated 100.847 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/16/10	Ethylene g/µg/l	2.68×10^3	2.68×10^3	2.49×10^3	2.49×10^3	7.6	7.6
2	ICAL	12/21/10	Ethylene g/µg/l						
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 #: 25 337J5
SDG #: w cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: F2
2nd Reviewer: A

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	E355.09	12/21/10	Ethylene glycol	100.85	93.68	93.68	7.1	7.1
	E355.2	12/21/10	↓	100.85	100.06	100.06	0.8	0.8
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.

LDC #: 25 [illegible]

SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer: [illegible]

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
#						
Tetramethylene glycol	N7	197.	138.1246	70	70	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 #: 15 [illegible]/J73
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: EZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration SC = Sample concentration
SA = Spike added
RPD =(({SSCMS - SSCMSD} * 2) / (SSCMS + SSCMSD))*100 MS = Matrix spike MSD = Matrix spike duplicate

MS/MSD samples: 6 + 7

Compound	Spike Added (mg/kg)		Sample Conc. (mg/kg)	Spike Sample Concentration (mg/kg)		Matrix spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	--	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
Ethylene glycol	199.44	199.44	ND	170	180	85	85	88	88	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 #: 25337J45
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: R
2nd Reviewer: Q

METHOD: ✓ **GC** __ **HPLC**

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (mg/kg)		Spiked Sample Concentration (mg/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Ethylene Glycol	199.44	NA	160	NA	79	79	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J45
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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

METHOD: ✓ GC ___ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (A)(Fv)(Df) / (RF)(Vs or Ws)(%S/100)

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID._____ Compound Name _____

Concentration =_____

ND

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 11, 2011
Matrix:	Soil
Parameters:	Formaldehyde
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SL-002-SA5C-SB-4.0-5.0
SL-002-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-9.0-10.0
SL-004-SA5C-SB-4.0-5.0
SL-060-SA5C-SB-10.0-11.0

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 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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SL-002-SA5C-SB-4.0-5.0 SL-002-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-9.0-10.0 SL-004-SA5C-SB-4.0-5.0 SL-060-SA5C-SB-10.0-11.0	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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Formaldehyde - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J71 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/10/11

SDG #: DE039 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: 12/14/10
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: SOIL

1	SL-002-SA5C-SB-4.0-5.0	11	PBLK2135	21		31	
2	SL-002-SA5C-SB-9.0-10.0	12		22		32	
3	SL-004-SA5C-SB-9.0-10.0	13		23		33	
4	SL-004-SA5C-SB-4.0-~~5.0~~ 5.0	14		24		34	
5	SL-060-SA5C-SB-10.0-11.0	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 #: 25337J71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: FM
2nd Reviewer: [illegible]

Method: ✓ GC ____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.			✓	
Was a MS/MSD analyzed every 20 samples of each matrix?			✓	
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?			✓	
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25737J71
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25337 J7/
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: F7
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported 2002.0 CF (std)	Recalculated 2002.0 CF (std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/22/10	Formaldehyde	6.23×10^{1}	6.23×10^{1}	6.11×10^{1}	6.11×10^{1}	10.8	10.8
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 #: 25337J7/
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	IF4356.20R	12/22/10	Formaldehyde	10010.00	8858.19	8858.19	11.5	11.5
	IF4356.31R	12/23/10	↓	↓	8774.58	8774.58	12.3	12.3
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 #: 25305071

SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT

2nd reviewer:

METHOD: ~~GC~~ __ HPLC

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Butyraldehyde	NS	1986	3932.687 / 2	~~100~~ 99	99	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 #: 25337J7/
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: F2
2nd Reviewer: A

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
Formaldehyde	5010	NA	5000	NA	100	100	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J7
SDG #: all same

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #2 Compound Name Formaldehyde

Concentration = $\frac{(190978)(200000)(0.1)}{(6.11 \times 10^{1})(20)(0.833)(1000)}$

= 3752 ng/kg

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name:	Santa Susana Field Laboratory
Collection Date:	December 14, 2010
LDC Report Date:	May 13, 2011
Matrix:	Sediment
Parameters:	Perchlorate
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE039

Sample Identification

SED-024SIV-SD-0.0-0.5
SED-024SIV-SD-0.0-0.5MS
SED-024SIV-SD-0.0-0.5MSD

Introduction

This data review covers 3 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 6850 for Perchlorate.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review (June 2008).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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 50.0% for perchlorate.

V. Blanks

Method blanks were reviewed for each matrix as applicable. No perchlorate was found in the method blanks.

No field blanks were identified in this SDG.

VI. Surrogate Spikes

Surrogate spikes were not required by the method.

VII. Matrix Spike/Matrix Spike Duplicates

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 DE039	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 DE039

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE039	SED-024SIV-SD-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 DE039

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Perchlorate - Field Blank Data Qualification Summary - SDG DE039

No Sample Data Qualified in this SDG

LDC #: 25337J87 **VALIDATION COMPLETENESS WORKSHEET** Date: 5/11/11
SDG #: DE039 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: FT
2nd Reviewer:

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: 12/14/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 15/50 LODV ≤ 50
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: Sediment

1	SED-024-SIV-SD-0.0-0.5	11	PBLK20350	21		31	
2	#1 MS	12		22		32	
3	#1 MSD	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 #: 25337J87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT

2nd Reviewer: A

6850

Method: ~~Semivolatiles (EPA SW 846 Method 8270C)~~

Validation Area	Yes	No	NA	Findings/Comments
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
Were the DFTPP performance results reviewed and found to be within the specified criteria?	✓			
Were all samples analyzed within the 12 hour clock criteria?	✓			
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?			✓	
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?			✓	
Were all percent differences (%D) ~~≤ 25%~~ 15 + 50 and relative response factors (RRF) ≥ 0.05?	✓			
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.		✓		
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?			✓	
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?	✓			
Was an LCS analyzed for this SDG?	✓			

LDC #: 25337J87

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: a

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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?	✓			
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?	✓			
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?	✓			
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)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.		✓		
Target compounds were detected in the field duplicates.			✓	
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC # 25337J87
SDG# all cores

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: EF
2nd Reviewer:

METHOD: Method 6850

Parameter: perchlorate

Date	Column	Compound	y	x	
12/10/2010	LCMS	perchlorate	0.0252	0.020	
			0.0533	0.040	
			0.1221	0.100	
			0.2514	0.200	
			0.4626	0.400	
			1.1661	1.000	
			2.8475	2.500	

Regression Output:		Regression Output:	Reported	
Constant		0.01217		1.2200E-003
Std Err of Y Est		0.01119		
R Squared		0.99990		0.99999
No. of Observations		7.00000		
Degrees of Freedom		5.00000		
X Coefficient(s)	1.137E+000		0.11370	
Std Err of Coef.	0.005072	0.04		

LDC #: 25337087

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer: A

6850

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270C)~~

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ms5p3551001C	12/22/10	~~Phenol~~ (1st internal standard) Perchlorate	4	3.92		2	2
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
2	ms5p3561002J	12/22/10	~~Phenol~~ (1st internal standard) Perchlorate	0.4	0.337	0.337	16	16
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J87

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

6850

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = I MSC - MSC I * 2/(MSC + MSDC) MSC = Matrix spike concentration MSDC = Matrix spike duplicate concentration

MS/MSD samples: 2 + 3

Compound	Spike Added (ug/kg)		Sample Concentration (ug/kg)	Spiked Sample Concentration (ug/kg)		Matrix Spike Percent Recovery		Matrix Spike Duplicate Percent Recovery		MS/MSD RPD	
	MS	MSD	------	MS	MSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalculated
Phenol											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene											
Pentachlorophenol											
Pyrene											
Perchlorate	100	100	ND	110	110	100	100	100	100	0	0

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J8/

VALIDATION FINDINGS WORKSHEET

Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

6850

METHOD: ~~GC/MS BNA (EPA SW-846 Method 8270)~~

The percent recoveries (%R) and Relative Percent Difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SC/SA Where: SSC = Spike concentration
SA = Spike added

RPD = | LCSC - LCSDC | * 2/(LCSC + LCSDC) LCSC = Laboraotry control sample concentration LCSDC = Laboratory control sample duplicate concentration

LCS/LCSD samples: 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										
Pentachlorophenol										
Pyrene										
Perchlorate	100	NA	99	NA	99	99	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25337J87
6850

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Reviewer: FT
2nd reviewer: A

METHOD: ~~GC/MS BNA (EPA SW 846 Method 8270)~~

Y N ~~N/A~~ Were all reported results recalculated and verified for all level IV samples?
Y N ~~N/A~~ Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_i	=	Volume of extract injected in microliters (ul)
V_t	=	Volume of the concentrated extract in microliters (ul)
Df	=	Dilution Factor.
%S	=	Percent solids, applicable to soil and solid matrices only.
2.0	=	Factor of 2 to account for GPC cleanup

Example:

Sample I.D. _____, _____:

Conc. = $\frac{(\quad)(\quad)(\quad)(\quad)(\quad)}{(\quad)(\quad)(\quad)(\quad)(\quad)}$

= ND

#	Sample ID	Compound	Reported Concentration ( )	Calculated Concentration ( )	Qualification

SAMPLE DELIVERY GROUP

DE040

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-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3050B	6010B	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3050B	6020	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3060A	7199	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3550B	8081A	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3550B	8082	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3550B	8151A	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3550B	8270C	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	3550B	8270C SIM	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	Gen Prep	314.0	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	Gen Prep	9045M	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	METHOD	300.0	III
15-Dec-2010	SED-021-SIV-SD-0.0-0.5	6166079	N	METHOD	7471A	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3050B	6010B	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3060A	7199	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3550B	8081A	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3550B	8082	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3550B	8151A	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3550B	8270C	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	3550B	8270C SIM	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	Gen Prep	314.0	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	Gen Prep	9045M	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	METHOD	300.0	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5	6166075	N	METHOD	7471A	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3050B	6010B	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	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-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3060A	7199	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3550B	8081A	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3550B	8082	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3550B	8151A	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3550B	8270C	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	3550B	8270C SIM	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	Gen Prep	314.0	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	Gen Prep	9045M	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	METHOD	300.0	III
15-Dec-2010	SL-134-SA5B-SS-0.0-0.5	6166078	N	METHOD	7471A	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5DUP	P166075D221248A	DUP	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5DUP	P166075D221248B	DUP	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5DUP	P166075D221248C	DUP	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5DUP	P166075D221248D	DUP	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MSD	P166075M221254A	MSD	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MSD	P166075M221254B	MSD	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MSD	P166075M221254C	MSD	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MSD	P166075M221254D	MSD	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MSD	P166075M240247A	MSD	3550B	8081A	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MS	P166075R221251A	MS	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MS	P166075R221251B	MS	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MS	P166075R221251C	MS	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MS	P166075R221251D	MS	3050B	6020	III
15-Dec-2010	SL-133-SA5B-SS-0.0-0.5MS	P166075R240233A	MS	3550B	8081A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3050B	6010B	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	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-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3060A	7199	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3550B	8081A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3550B	8082	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3550B	8151A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3550B	8270C	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	3550B	8270C SIM	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	Gen Prep	314.0	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	Gen Prep	9045M	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	METHOD	300.0	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5	6166074	N	METHOD	7471A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5DUP	P166074D220551	DUP	METHOD	7471A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5DUP	P166074D221246	DUP	3050B	6010B	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5DUP	P166074D221340	DUP	3050B	6010B	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5DUP	P166074D270225A	DUP	Gen Prep	314.0	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5DUP	P166074D272253A	DUP	METHOD	300.0	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5DUP	P166074D291330A	DUP	Gen Prep	9045M	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M220554	MSD	METHOD	7471A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M221254	MSD	3050B	6010B	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M221347	MSD	3050B	6010B	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M241230A	MSD	3550B	8151A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M241550A	MSD	3550B	8082	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M260917	MSD	3550B	8270C SIM	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MSD	P166074M261819	MSD	3550B	8270C	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R220552	MS	METHOD	7471A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R221250	MS	3050B	6010B	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R221344	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
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R241203A	MS	3550B	8151A	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R241531A	MS	3550B	8082	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R260844	MS	3550B	8270C SIM	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R261744	MS	3550B	8270C	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R270249A	MS	Gen Prep	314.0	III
15-Dec-2010	SL-132-SA5B-SS-0.0-0.5MS	P166074R272308A	MS	METHOD	300.0	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3050B	6010B	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3050B	6020	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3060A	7199	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3550B	8081A	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3550B	8082	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3550B	8151A	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3550B	8270C	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	3550B	8270C SIM	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	Gen Prep	314.0	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	Gen Prep	9045M	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	METHOD	300.0	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	METHOD	6850	III
15-Dec-2010	SL-135-SA5B-SS-0.0-0.5	6166077	N	METHOD	7471A	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3050B	6010B	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3050B	6020	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3060A	7199	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3550B	8081A	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3550B	8082	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3550B	8151A	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	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
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	3550B	8270C SIM	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	Gen Prep	314.0	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	Gen Prep	9045M	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	METHOD	300.0	III
15-Dec-2010	SL-131-SA5B-SS-0.0-0.5	6166076	N	METHOD	7471A	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3050B	6010B	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3050B	6020	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3060A	7199	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3550B	8081A	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3550B	8082	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3550B	8151A	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3550B	8270C	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	3550B	8270C SIM	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	Gen Prep	314.0	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	Gen Prep	9045M	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	METHOD	300.0	III
15-Dec-2010	SED-018-SIV-SD-0.0-0.5	6166080	N	METHOD	7471A	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3050B	6010B	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3050B	6020	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3060A	7199	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3550B	8081A	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3550B	8082	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3550B	8151A	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3550B	8270C	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	3550B	8270C SIM	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	Gen Prep	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-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	Gen Prep	9045M	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	METHOD	300.0	III
15-Dec-2010	SL-257-SA5B-SS-0.0-0.5	6166091	N	METHOD	7471A	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3050B	6010B	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3050B	6020	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3060A	7199	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3550B	8081A	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3550B	8082	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3550B	8151A	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3550B	8270C	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	3550B	8270C SIM	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	Gen Prep	314.0	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	Gen Prep	9045M	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	METHOD	300.0	III
15-Dec-2010	SL-156-SA5B-SS-0.0-0.5	6166086	N	METHOD	7471A	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3050B	6010B	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3050B	6020	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3060A	7199	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3550B	8081A	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3550B	8082	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3550B	8151A	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3550B	8270C	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	3550B	8270C SIM	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	Gen Prep	314.0	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	Gen Prep	9045M	III
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	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
15-Dec-2010	SED-016-SIV-SD-0.0-0.5	6166082	N	METHOD	7471A	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3050B	6010B	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3050B	6020	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3060A	7199	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3550B	8081A	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3550B	8082	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3550B	8151A	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3550B	8270C	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	3550B	8270C SIM	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	Gen Prep	314.0	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	Gen Prep	9045M	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	METHOD	300.0	III
15-Dec-2010	SL-155-SA5B-SS-0.0-0.5	6166084	N	METHOD	7471A	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3050B	6010B	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3050B	6020	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3060A	7199	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3550B	8081A	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3550B	8082	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3550B	8151A	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3550B	8270C	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	3550B	8270C SIM	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	Gen Prep	314.0	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	Gen Prep	9045M	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	METHOD	300.0	III
15-Dec-2010	SL-136-SA5B-SS-0.0-0.5	6166089	N	METHOD	7471A	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	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
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3050B	6020	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3060A	7199	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3550B	8081A	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3550B	8082	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3550B	8151A	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3550B	8270C	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	3550B	8270C SIM	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	Gen Prep	314.0	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	Gen Prep	9045M	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	METHOD	300.0	III
15-Dec-2010	SL-153-SA5B-SS-0.0-0.5	6166083	N	METHOD	7471A	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3050B	6010B	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3050B	6020	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3060A	7199	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3550B	8081A	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3550B	8082	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3550B	8151A	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3550B	8270C	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	3550B	8270C SIM	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	Gen Prep	314.0	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	Gen Prep	9045M	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	METHOD	300.0	III
15-Dec-2010	SL-203-SA5B-SS-0.0-0.5	6166090	N	METHOD	7471A	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3050B	6010B	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3050B	6020	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	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-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3550B	8081A	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3550B	8082	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3550B	8151A	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3550B	8270C	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	3550B	8270C SIM	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	Gen Prep	314.0	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	Gen Prep	9045M	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	METHOD	300.0	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	METHOD	6850	III
15-Dec-2010	SL-150-SA5B-SS-0.0-0.5	6166087	N	METHOD	7471A	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3050B	6010B	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3050B	6020	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3060A	7199	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3550B	8081A	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3550B	8082	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3550B	8151A	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3550B	8270C	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	3550B	8270C SIM	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	Gen Prep	314.0	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	Gen Prep	9045M	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	METHOD	300.0	III
15-Dec-2010	SL-181-SA5B-SS-0.0-0.5	6166088	N	METHOD	7471A	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3050B	6010B	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3050B	6020	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3060A	7199	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	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
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3550B	8082	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3550B	8151A	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3550B	8270C	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	3550B	8270C SIM	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	Gen Prep	314.0	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	Gen Prep	9045M	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	METHOD	300.0	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5	6166085	N	METHOD	7471A	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5DUP	P166085D270212B	DUP	METHOD	300.0	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5DUP	P166085D270737B	DUP	Gen Prep	314.0	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5MS	P166085R270226B	MS	METHOD	300.0	III
15-Dec-2010	SL-149-SA5B-SS-0.0-0.5MS	P166085R270801B	MS	Gen Prep	314.0	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3050B	6010B	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3050B	6020	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3060A	7199	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3550B	8081A	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3550B	8082	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3550B	8151A	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3550B	8270C	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	3550B	8270C SIM	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	Gen Prep	314.0	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	Gen Prep	9045M	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	METHOD	300.0	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5	6166092	N	METHOD	7471A	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5DUP	P166092D271357A	DUP	3060A	7199	III
15-Dec-2010	SL-204-SA5B-SS-0.0-0.5MS	P166092R271432A	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-133-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
FLUORIDE	1.0	J	0.86	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.30	J	0.993	MDL	5.58	PQL	mg/Kg	J	Z
IRON	19300		5.26	MDL	22.3	PQL	mg/Kg	J	E
POTASSIUM	2780		20.1	MDL	55.8	PQL	mg/Kg	J	Q
SODIUM	89.4	J	41.6	MDL	112	PQL	mg/Kg	J	Z

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2450		6.84	MDL	22.3	PQL	mg/Kg	J	A
LITHIUM	22.0		0.25	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	4220		2.83	MDL	11.2	PQL	mg/Kg	J	A
MANGANESE	260		0.0871	MDL	0.558	PQL	mg/Kg	J	E, E
PHOSPHORUS	299		0.625	MDL	11.2	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	14.0		0.0692	MDL	0.558	PQL	mg/Kg	J	E
TIN	2.59	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	1.30	J	0.938	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
IRON	20100		5.18	MDL	22.0	PQL	mg/Kg	J	E
POTASSIUM	3880		19.8	MDL	54.9	PQL	mg/Kg	J	Q
SODIUM	71.2	J	41.0	MDL	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	3310		6.74	MDL	22.0	PQL	mg/Kg	J	A
LITHIUM	27.1		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	4410		2.79	MDL	11.0	PQL	mg/Kg	J	A
MANGANESE	306		0.0857	MDL	0.549	PQL	mg/Kg	J	E, E
PHOSPHORUS	394		0.615	MDL	11.0	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	14.8		0.0681	MDL	0.549	PQL	mg/Kg	J	E
TIN	2.55	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.38	J	0.923	MDL	5.49	PQL	mg/Kg	J	Z

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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	3.56	J	0.919	MDL	5.17	PQL	mg/Kg	J	Z
IRON	16900		4.87	MDL	20.7	PQL	mg/Kg	J	E
POTASSIUM	2920		18.6	MDL	51.7	PQL	mg/Kg	J	Q
SODIUM	63.5	J	38.5	MDL	103	PQL	mg/Kg	J	Z

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	1820		6.33	MDL	20.7	PQL	mg/Kg	J	A
LITHIUM	19.8		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	3980		2.62	MDL	10.3	PQL	mg/Kg	J	A
MANGANESE	239		0.0806	MDL	0.517	PQL	mg/Kg	J	E, E
PHOSPHORUS	324		0.579	MDL	10.3	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	7.16		0.0641	MDL	0.517	PQL	mg/Kg	J	E
TIN	2.17	J	1.03	MDL	10.3	PQL	mg/Kg	U	B

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
IRON	22500		4.71	MDL	20.0	PQL	mg/Kg	J	E
POTASSIUM	3720		18.0	MDL	50.0	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-131-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
CALCIUM	3180		6.13	MDL	20.0	PQL	mg/Kg	J	A
LITHIUM	20.8		0.22	MDL	2.0	PQL	mg/Kg	J	E
MAGNESIUM	4620		2.54	MDL	10.0	PQL	mg/Kg	J	A
MANGANESE	331		0.0780	MDL	0.500	PQL	mg/Kg	J	E, E
PHOSPHORUS	422		0.560	MDL	10.0	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	20.3		0.0620	MDL	0.500	PQL	mg/Kg	J	E
TIN	2.49	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	3.08	J	0.840	MDL	5.00	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:05:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	20200		5.15	MDL	21.9	PQL	mg/Kg	J	E
POTASSIUM	2520		19.7	MDL	54.7	PQL	mg/Kg	J	Q

Sample ID: SL-132-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:05:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3050		6.70	MDL	21.9	PQL	mg/Kg	J	A
LITHIUM	15.5		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	3690		2.78	MDL	10.9	PQL	mg/Kg	J	A
MANGANESE	219		0.0853	MDL	0.547	PQL	mg/Kg	J	E, E
PHOSPHORUS	399		0.612	MDL	10.9	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	26.7		0.0678	MDL	0.547	PQL	mg/Kg	J	E
TIN	2.60	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	2.36	J	0.918	MDL	5.47	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
IRON	18700		5.00	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	2550		19.1	MDL	53.1	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-133-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
CALCIUM	3070		6.51	MDL	21.2	PQL	mg/Kg	J	A
LITHIUM	15.8		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	3560		2.70	MDL	10.6	PQL	mg/Kg	J	A
MANGANESE	211		0.0829	MDL	0.531	PQL	mg/Kg	J	E, E
PHOSPHORUS	412		0.595	MDL	10.6	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	20.4		0.0659	MDL	0.531	PQL	mg/Kg	J	E
TIN	2.24	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.92	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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	4.96	J	0.918	MDL	5.15	PQL	mg/Kg	J	Z
IRON	19300		4.86	MDL	20.6	PQL	mg/Kg	J	E
POTASSIUM	2550		18.6	MDL	51.5	PQL	mg/Kg	J	Q

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
CALCIUM	2490		6.32	MDL	20.6	PQL	mg/Kg	J	A
LITHIUM	19.8		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	3630		2.62	MDL	10.3	PQL	mg/Kg	J	A
MANGANESE	213		0.0804	MDL	0.515	PQL	mg/Kg	J	E, E
PHOSPHORUS	330		0.577	MDL	10.3	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	15.6		0.0639	MDL	0.515	PQL	mg/Kg	J	E
TIN	2.32	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.38	J	0.866	MDL	5.15	PQL	mg/Kg	J	Z

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:13:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	20800		5.08	MDL	21.6	PQL	mg/Kg	J	E
POTASSIUM	3280		19.4	MDL	53.9	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-135-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	2960		6.61	MDL	21.6	PQL	mg/Kg	J	A
LITHIUM	21.3		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	4500		2.74	MDL	10.8	PQL	mg/Kg	J	A
MANGANESE	250		0.0841	MDL	0.539	PQL	mg/Kg	J	E, E
PHOSPHORUS	414		0.604	MDL	10.8	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	13.8		0.0669	MDL	0.539	PQL	mg/Kg	J	E
TIN	2.56	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.84	J	0.906	MDL	5.39	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.64	J	0.976	MDL	5.48	PQL	mg/Kg	J	Z
IRON	21400		5.16	MDL	21.9	PQL	mg/Kg	J	E
POTASSIUM	3240		19.7	MDL	54.8	PQL	mg/Kg	J	Q

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	4040		6.72	MDL	21.9	PQL	mg/Kg	J	A
LITHIUM	17.1		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	4070		2.79	MDL	11.0	PQL	mg/Kg	J	A
MANGANESE	216		0.0855	MDL	0.548	PQL	mg/Kg	J	E, E
PHOSPHORUS	791		0.614	MDL	11.0	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	25.0		0.0680	MDL	0.548	PQL	mg/Kg	J	E
TIN	2.25	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.921	MDL	5.48	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:50:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	22600		4.87	MDL	20.7	PQL	mg/Kg	J	E
POTASSIUM	3020		18.6	MDL	51.7	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: DE040 Laboratory: LL

EDD Filename: PrepDE040_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-149-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	3370		6.34	MDL	20.7	PQL	mg/Kg	J	A
LITHIUM	21.9		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	4170		2.63	MDL	10.3	PQL	mg/Kg	J	A
MANGANESE	294		0.0806	MDL	0.517	PQL	mg/Kg	J	E, E
PHOSPHORUS	382		0.579	MDL	10.3	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	18.8		0.0641	MDL	0.517	PQL	mg/Kg	J	E
TIN	2.46	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.39	J	0.868	MDL	5.17	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
IRON	25100		4.86	MDL	20.6	PQL	mg/Kg	J	E
POTASSIUM	3360		18.6	MDL	51.6	PQL	mg/Kg	J	Q

Sample ID: SL-150-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	3330		6.33	MDL	20.6	PQL	mg/Kg	J	A
LITHIUM	27.3		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	5180		2.62	MDL	10.3	PQL	mg/Kg	J	A
MANGANESE	286		0.0805	MDL	0.516	PQL	mg/Kg	J	E, E
PHOSPHORUS	369		0.578	MDL	10.3	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	20.1		0.0640	MDL	0.516	PQL	mg/Kg	J	E
TIN	2.89	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	0.993	J	0.867	MDL	5.16	PQL	mg/Kg	J	Z

Sample ID: SL-153-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 2:08:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	21400		5.22	MDL	22.2	PQL	mg/Kg	J	E
POTASSIUM	3000		19.9	MDL	55.4	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3630		6.79	MDL	22.2	PQL	mg/Kg	J	A
LITHIUM	17.3		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	4110		2.81	MDL	11.1	PQL	mg/Kg	J	A
MANGANESE	274		0.0864	MDL	0.554	PQL	mg/Kg	J	E, E
PHOSPHORUS	336		0.620	MDL	11.1	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	26.8		0.0687	MDL	0.554	PQL	mg/Kg	J	E
TIN	2.54	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	2.00	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	25700		4.87	MDL	20.7	PQL	mg/Kg	J	E
POTASSIUM	3820		18.6	MDL	51.7	PQL	mg/Kg	J	Q

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3280		6.34	MDL	20.7	PQL	mg/Kg	J	A
LITHIUM	24.4		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	4760		2.63	MDL	10.3	PQL	mg/Kg	J	A
MANGANESE	331		0.0807	MDL	0.517	PQL	mg/Kg	J	E, E
PHOSPHORUS	483		0.579	MDL	10.3	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	25.0		0.0641	MDL	0.517	PQL	mg/Kg	J	E
TIN	2.58	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.99	J	0.869	MDL	5.17	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:32:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	22300		5.01	MDL	21.3	PQL	mg/Kg	J	E
POTASSIUM	3620		19.1	MDL	53.2	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-156-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
CALCIUM	3270		6.52	MDL	21.3	PQL	mg/Kg	J	A
LITHIUM	19.5		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	4010		2.70	MDL	10.6	PQL	mg/Kg	J	A
MANGANESE	371		0.0830	MDL	0.532	PQL	mg/Kg	J	E, E
PHOSPHORUS	310		0.596	MDL	10.6	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	22.1		0.0659	MDL	0.532	PQL	mg/Kg	J	E
TIN	2.51	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.60	J	0.893	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:26:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	20000		5.02	MDL	21.3	PQL	mg/Kg	J	E
POTASSIUM	3310		19.2	MDL	53.3	PQL	mg/Kg	J	Q
SODIUM	102	J	39.7	MDL	107	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3150		6.53	MDL	21.3	PQL	mg/Kg	J	A
LITHIUM	17.3		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	3340		2.71	MDL	10.7	PQL	mg/Kg	J	A
MANGANESE	327		0.0831	MDL	0.533	PQL	mg/Kg	J	E, E
PHOSPHORUS	258		0.597	MDL	10.7	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	25.5		0.0661	MDL	0.533	PQL	mg/Kg	J	E
TIN	2.56	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.27	J	0.895	MDL	5.33	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
IRON	23900		4.89	MDL	20.7	PQL	mg/Kg	J	E
POTASSIUM	3940		18.7	MDL	51.9	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3520		6.36	MDL	20.7	PQL	mg/Kg	J	A
LITHIUM	21.6		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	4420		2.64	MDL	10.4	PQL	mg/Kg	J	A
MANGANESE	290		0.0809	MDL	0.519	PQL	mg/Kg	J	E, E
PHOSPHORUS	386		0.581	MDL	10.4	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	25.0		0.0643	MDL	0.519	PQL	mg/Kg	J	E
TIN	2.62	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.46	J	0.871	MDL	5.19	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.93	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
IRON	21200		5.00	MDL	21.2	PQL	mg/Kg	J	E
POTASSIUM	2590		19.1	MDL	53.1	PQL	mg/Kg	J	Q

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	3330		6.51	MDL	21.2	PQL	mg/Kg	J	A
LITHIUM	20.0		0.23	MDL	2.1	PQL	mg/Kg	J	E
MAGNESIUM	3900		2.70	MDL	10.6	PQL	mg/Kg	J	A
MANGANESE	262		0.0828	MDL	0.531	PQL	mg/Kg	J	E, E
PHOSPHORUS	356		0.594	MDL	10.6	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	24.4		0.0658	MDL	0.531	PQL	mg/Kg	J	E
TIN	2.56	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	3.02	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SL-257-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:25:00 ***Analysis Type:*** REA ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.19	J	0.960	MDL	5.39	PQL	mg/Kg	J	Z
IRON	20000		5.08	MDL	21.6	PQL	mg/Kg	J	E
POTASSIUM	2670		19.4	MDL	53.9	PQL	mg/Kg	J	Q
SODIUM	89.8	J	40.2	MDL	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
CALCIUM	2640		6.61	MDL	21.6	PQL	mg/Kg	J	A
LITHIUM	21.7		0.24	MDL	2.2	PQL	mg/Kg	J	E
MAGNESIUM	3840		2.74	MDL	10.8	PQL	mg/Kg	J	A
MANGANESE	255		0.0841	MDL	0.539	PQL	mg/Kg	J	E, E
PHOSPHORUS	317		0.604	MDL	10.8	PQL	mg/Kg	J	Q, Q, E
STRONTIUM	14.9		0.0669	MDL	0.539	PQL	mg/Kg	J	E
TIN	3.01	J	1.08	MDL	10.8	PQL	mg/Kg	U	B
Zirconium	1.26	J	0.906	MDL	5.39	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0957	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	69.7		0.118	MDL	0.438	PQL	mg/Kg	J	A

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *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	Q
ARSENIC	4.07		0.0657	MDL	0.438	PQL	mg/Kg	J	Q
CHROMIUM	17.9		0.131	MDL	0.438	PQL	mg/Kg	J	Q, E, A
COBALT	4.65		0.0219	MDL	0.109	PQL	mg/Kg	J	A
LEAD	6.00		0.0114	MDL	0.219	PQL	mg/Kg	J	Q, E, A
NICKEL	10.3		0.109	MDL	0.438	PQL	mg/Kg	J	E, A
SILVER	0.0265	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z
VANADIUM	32.7		0.0241	MDL	0.109	PQL	mg/Kg	J	Q, A
ZINC	62.4		0.613	MDL	3.28	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 12:31:00 *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	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
BARIUM	80.1		0.119	MDL	0.440	PQL	mg/Kg	J	A

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 12:31:00 *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	UJ	Q
ARSENIC	4.12		0.0659	MDL	0.440	PQL	mg/Kg	J	Q
CHROMIUM	15.9		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E, A
COBALT	4.39		0.0220	MDL	0.110	PQL	mg/Kg	J	A
LEAD	7.20		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E, A
NICKEL	9.70		0.110	MDL	0.440	PQL	mg/Kg	J	E, A
SILVER	0.0255	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	28.6		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	54.9		0.615	MDL	3.30	PQL	mg/Kg	J	E, A

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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	0.0924	J	0.0405	MDL	0.405	PQL	mg/Kg	J	Z

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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	62.3		0.109	MDL	0.405	PQL	mg/Kg	J	A

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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	0.0608	U	0.0608	MDL	0.203	PQL	mg/Kg	UJ	Q
ARSENIC	2.43		0.0608	MDL	0.405	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
CADMIUM	0.0800	J	0.0365	MDL	0.101	PQL	mg/Kg	J	Z
CHROMIUM	12.5		0.122	MDL	0.405	PQL	mg/Kg	J	Q, E, A
COBALT	3.62		0.0203	MDL	0.101	PQL	mg/Kg	J	A
LEAD	5.31		0.0105	MDL	0.203	PQL	mg/Kg	J	Q, E, A
NICKEL	6.99		0.101	MDL	0.405	PQL	mg/Kg	J	E, A
SILVER	0.0170	J	0.0122	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	26.8		0.0223	MDL	0.101	PQL	mg/Kg	J	Q, A
ZINC	42.6		0.567	MDL	3.04	PQL	mg/Kg	J	E, A

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	0.128	J	0.0420	MDL	0.420	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	113		0.113	MDL	0.420	PQL	mg/Kg	J	A

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	0.0800	J	0.0630	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	4.13		0.0630	MDL	0.420	PQL	mg/Kg	J	Q
CHROMIUM	26.1		0.126	MDL	0.420	PQL	mg/Kg	J	Q, E, A
COBALT	6.36		0.0210	MDL	0.105	PQL	mg/Kg	J	A
LEAD	18.9		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E, A
NICKEL	16.6		0.105	MDL	0.420	PQL	mg/Kg	J	E, A
SILVER	0.0671	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	41.0		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	103		0.588	MDL	3.15	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-132-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:05:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	84.9		0.119	MDL	0.442	PQL	mg/Kg	J	A

Sample ID: SL-132-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:05:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0662	U	0.0662	MDL	0.221	PQL	mg/Kg	UJ	Q
ARSENIC	3.84		0.0662	MDL	0.442	PQL	mg/Kg	J	Q
CHROMIUM	22.6		0.132	MDL	0.442	PQL	mg/Kg	J	Q, E, A
COBALT	5.22		0.0221	MDL	0.110	PQL	mg/Kg	J	A
LEAD	19.8		0.0115	MDL	0.221	PQL	mg/Kg	J	Q, E, A
NICKEL	14.3		0.110	MDL	0.442	PQL	mg/Kg	J	E, A
SILVER	0.109	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	37.2		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	76.6		0.618	MDL	3.31	PQL	mg/Kg	J	E, A

Sample ID: SL-133-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 10:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.125	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-133-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 10:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	58.2		0.114	MDL	0.421	PQL	mg/Kg	J	A

Sample ID: SL-133-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	0.141	J	0.0631	MDL	0.210	PQL	mg/Kg	J	Z, Q
ARSENIC	2.81		0.0631	MDL	0.421	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-133-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
CHROMIUM	14.1		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	3.76		0.0210	MDL	0.105	PQL	mg/Kg	J	A
LEAD	9.98		0.0109	MDL	0.210	PQL	mg/Kg	J	Q, E, A
NICKEL	11.6		0.105	MDL	0.421	PQL	mg/Kg	J	E, A
SILVER	0.0610	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	30.1		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	91.5		0.589	MDL	3.16	PQL	mg/Kg	J	E, A

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 10:55:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.101	J	0.0408	MDL	0.408	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 10:55:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	72.6		0.110	MDL	0.408	PQL	mg/Kg	J	A

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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	0.118	J	0.0613	MDL	0.204	PQL	mg/Kg	J	Z, Q
ARSENIC	4.77		0.0613	MDL	0.408	PQL	mg/Kg	J	Q
CHROMIUM	28.1		0.123	MDL	0.408	PQL	mg/Kg	J	Q, E, A
COBALT	5.29		0.0204	MDL	0.102	PQL	mg/Kg	J	A
LEAD	13.8		0.0106	MDL	0.204	PQL	mg/Kg	J	Q, E, A
NICKEL	17.6		0.102	MDL	0.408	PQL	mg/Kg	J	E, A
VANADIUM	37.0		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, A
ZINC	66.3		0.572	MDL	3.06	PQL	mg/Kg	J	E, A

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:13:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0906	J	0.0440	MDL	0.440	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: DE040 Laboratory: LL

EDD Filename: PrepDE040_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-135-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:13:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	66.1		0.119	MDL	0.440	PQL	mg/Kg	J	A

Sample ID: SL-135-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:13:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.207	J	0.0660	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	4.00		0.0660	MDL	0.440	PQL	mg/Kg	J	Q
CHROMIUM	16.9		0.132	MDL	0.440	PQL	mg/Kg	J	Q, E, A
COBALT	4.26		0.0220	MDL	0.110	PQL	mg/Kg	J	A
LEAD	80.9		0.0114	MDL	0.220	PQL	mg/Kg	J	Q, E, A
NICKEL	11.7		0.110	MDL	0.440	PQL	mg/Kg	J	E, A
VANADIUM	29.7		0.0242	MDL	0.110	PQL	mg/Kg	J	Q, A
ZINC	105		0.616	MDL	3.30	PQL	mg/Kg	J	E, A

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.104	J	0.0426	MDL	0.426	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:50:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	144		0.115	MDL	0.426	PQL	mg/Kg	J	A

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:50:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.150	J	0.0639	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	4.75		0.0639	MDL	0.426	PQL	mg/Kg	J	Q
CHROMIUM	25.0		0.128	MDL	0.426	PQL	mg/Kg	J	Q, E, A
COBALT	5.60		0.0213	MDL	0.106	PQL	mg/Kg	J	A
LEAD	44.6		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E, A
NICKEL	14.5		0.106	MDL	0.426	PQL	mg/Kg	J	E, A
VANADIUM	38.4		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, A
ZINC	145		0.596	MDL	3.19	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:50:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	289		1.46	MDL	7.83	PQL	mg/Kg	J	E, A

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:50:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.130	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
BARIUM	83.5		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:50:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0979	J	0.0626	MDL	0.209	PQL	mg/Kg	J	Z, Q
ARSENIC	5.28		0.0626	MDL	0.418	PQL	mg/Kg	J	Q
CHROMIUM	36.3		0.125	MDL	0.418	PQL	mg/Kg	J	Q, E, A
COBALT	6.07		0.0209	MDL	0.104	PQL	mg/Kg	J	A
LEAD	14.4		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E, A
NICKEL	22.3		0.104	MDL	0.418	PQL	mg/Kg	J	E, A
SILVER	0.0767	J	0.0125	MDL	0.104	PQL	mg/Kg	J	Z
VANADIUM	37.8		0.0230	MDL	0.104	PQL	mg/Kg	J	Q, A

Sample ID: SL-150-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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	0.143	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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	96.5		0.114	MDL	0.421	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-150-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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	0.139	J	0.0632	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	5.71		0.0632	MDL	0.421	PQL	mg/Kg	J	Q
CHROMIUM	34.9		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	6.56		0.0211	MDL	0.105	PQL	mg/Kg	J	A
LEAD	18.1		0.0109	MDL	0.211	PQL	mg/Kg	J	Q, E, A
NICKEL	21.9		0.105	MDL	0.421	PQL	mg/Kg	J	E, A
SILVER	0.0714	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	43.8		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	91.7		0.589	MDL	3.16	PQL	mg/Kg	J	E, A

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0452	MDL	0.452	PQL	mg/Kg	J	Z

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	97.2		0.122	MDL	0.452	PQL	mg/Kg	J	A

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.143	J	0.0678	MDL	0.226	PQL	mg/Kg	J	Z, Q
ARSENIC	4.42		0.0678	MDL	0.452	PQL	mg/Kg	J	Q
CHROMIUM	25.1		0.136	MDL	0.452	PQL	mg/Kg	J	Q, E, A
COBALT	6.13		0.0226	MDL	0.113	PQL	mg/Kg	J	A
LEAD	32.4		0.0117	MDL	0.226	PQL	mg/Kg	J	Q, E, A
NICKEL	16.0		0.113	MDL	0.452	PQL	mg/Kg	J	E, A
SILVER	0.108	J	0.0136	MDL	0.113	PQL	mg/Kg	J	Z
VANADIUM	41.9		0.0248	MDL	0.113	PQL	mg/Kg	J	Q, A
ZINC	84.1		0.633	MDL	3.39	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-155-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 1:41:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0925	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 1:41:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	84.6		0.111	MDL	0.410	PQL	mg/Kg	J	A

Sample ID: SL-155-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 1:41:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.148	J	0.0615	MDL	0.205	PQL	mg/Kg	J	Z, Q
ARSENIC	4.13		0.0615	MDL	0.410	PQL	mg/Kg	J	Q
CHROMIUM	22.3		0.123	MDL	0.410	PQL	mg/Kg	J	Q, E, A
COBALT	4.68		0.0205	MDL	0.102	PQL	mg/Kg	J	A
LEAD	6.90		0.0107	MDL	0.205	PQL	mg/Kg	J	Q, E, A
NICKEL	13.3		0.102	MDL	0.410	PQL	mg/Kg	J	E, A
SILVER	0.0459	J	0.0123	MDL	0.102	PQL	mg/Kg	J	Z
VANADIUM	32.0		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, A
ZINC	50.5		0.574	MDL	3.07	PQL	mg/Kg	J	E, A

Sample ID: SL-156-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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	0.0985	J	0.0425	MDL	0.425	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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	96.7		0.115	MDL	0.425	PQL	mg/Kg	J	A

Sample ID: SL-156-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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	0.115	J	0.0638	MDL	0.213	PQL	mg/Kg	J	Z, Q
ARSENIC	4.15		0.0638	MDL	0.425	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: DE040 **Laboratory: LL**

EDD Filename: PrepDE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-156-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
CHROMIUM	25.9		0.128	MDL	0.425	PQL	mg/Kg	J	Q, E, A
COBALT	5.49		0.0213	MDL	0.106	PQL	mg/Kg	J	A
LEAD	43.0		0.0111	MDL	0.213	PQL	mg/Kg	J	Q, E, A
NICKEL	14.6		0.106	MDL	0.425	PQL	mg/Kg	J	E, A
VANADIUM	35.9		0.0234	MDL	0.106	PQL	mg/Kg	J	Q, A
ZINC	69.1		0.596	MDL	3.19	PQL	mg/Kg	J	E, A

Sample ID: SL-181-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:26:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.147	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:26:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.113	MDL	0.418	PQL	mg/Kg	J	A

Sample ID: SL-181-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.175	J	0.0627	MDL	0.209	PQL	mg/Kg	J	Z, Q
ARSENIC	5.38		0.0627	MDL	0.418	PQL	mg/Kg	J	Q
CHROMIUM	24.0		0.125	MDL	0.418	PQL	mg/Kg	J	Q, E, A
COBALT	6.23		0.0209	MDL	0.105	PQL	mg/Kg	J	A
LEAD	12.8		0.0109	MDL	0.209	PQL	mg/Kg	J	Q, E, A
NICKEL	15.1		0.105	MDL	0.418	PQL	mg/Kg	J	E, A
SILVER	0.0727	J	0.0125	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	40.9		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, A
ZINC	58.8		0.585	MDL	3.14	PQL	mg/Kg	J	E, A

Sample ID: SL-203-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:00:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.112	J	0.0427	MDL	0.427	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.115	MDL	0.427	PQL	mg/Kg	J	A

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0641	MDL	0.214	PQL	mg/Kg	J	Z, Q
ARSENIC	6.13		0.0641	MDL	0.427	PQL	mg/Kg	J	Q
CHROMIUM	25.7		0.128	MDL	0.427	PQL	mg/Kg	J	Q, E, A
COBALT	6.21		0.0214	MDL	0.107	PQL	mg/Kg	J	A
LEAD	8.50		0.0111	MDL	0.214	PQL	mg/Kg	J	Q, E, A
NICKEL	15.4		0.107	MDL	0.427	PQL	mg/Kg	J	E, A
SILVER	0.0325	J	0.0128	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	40.9		0.0235	MDL	0.107	PQL	mg/Kg	J	Q, A
ZINC	61.8		0.598	MDL	3.20	PQL	mg/Kg	J	E, A

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***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	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	90.9		0.111	MDL	0.412	PQL	mg/Kg	J	A

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0824	J	0.0618	MDL	0.206	PQL	mg/Kg	J	Z, Q
ARSENIC	4.59		0.0618	MDL	0.412	PQL	mg/Kg	J	Q
CHROMIUM	18.5		0.124	MDL	0.412	PQL	mg/Kg	J	Q, E, A
COBALT	5.99		0.0206	MDL	0.103	PQL	mg/Kg	J	A
LEAD	7.61		0.0107	MDL	0.206	PQL	mg/Kg	J	Q, E, A
NICKEL	11.7		0.103	MDL	0.412	PQL	mg/Kg	J	E, A
SILVER	0.0326	J	0.0124	MDL	0.103	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-204-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:51:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
VANADIUM	32.6		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, A
ZINC	60.7		0.577	MDL	3.09	PQL	mg/Kg	J	E, A

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0807	J	0.0436	MDL	0.436	PQL	mg/Kg	J	Z

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	69.0		0.118	MDL	0.436	PQL	mg/Kg	J	A

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.132	J	0.0654	MDL	0.218	PQL	mg/Kg	J	Z, Q
ARSENIC	4.80		0.0654	MDL	0.436	PQL	mg/Kg	J	Q
CHROMIUM	19.3		0.131	MDL	0.436	PQL	mg/Kg	J	Q, E, A
COBALT	5.17		0.0218	MDL	0.109	PQL	mg/Kg	J	A
LEAD	16.9		0.0113	MDL	0.218	PQL	mg/Kg	J	Q, E, A
NICKEL	11.8		0.109	MDL	0.436	PQL	mg/Kg	J	E, A
VANADIUM	33.8		0.0240	MDL	0.109	PQL	mg/Kg	J	Q, A
ZINC	81.0		0.610	MDL	3.27	PQL	mg/Kg	J	E, A

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.81	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 Laboratory: LL

EDD Filename: PrepDE040_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SED-018-SIV-SD-0.0-0.5 **Collected:** 12/15/2010 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	0.34	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-132-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 11:05:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.73	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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
HEXAVALENT CHROMIUM	0.50	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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	0.59	J	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-150-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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
HEXAVALENT CHROMIUM	0.82	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 1:41:00 **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	0.21	MDL	1.0	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 3:26:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.44	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: DE040 Laboratory: LL

EDD Filename: PrepDE040_v1 eQAPP Name: CDM_SSFL_110509

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

Sample ID: SL-204-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:51:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.28	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

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

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0469	J	0.0032	MDL	0.110	PQL	mg/Kg	J	Z

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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	0.0097	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
MERCURY	0.0421	J	0.0028	MDL	0.0984	PQL	mg/Kg	J	Z

Sample ID: SL-134-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	0.0181	J	0.0029	MDL	0.0999	PQL	mg/Kg	J	Z

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
MERCURY	0.0387	J	0.0031	MDL	0.108	PQL	mg/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
MERCURY	0.0199	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-150-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
MERCURY	0.0135	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0513	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***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	0.0030	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-156-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
MERCURY	0.0880	J	0.0030	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-181-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:26:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0128	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0451	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0060	J	0.0028	MDL	0.0994	PQL	mg/Kg	J	Z

Sample ID: SL-257-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
MERCURY	0.0062	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *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	0.074	U	0.074	MDL	0.38	PQL	ug/Kg	UJ	L

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
DELTA-BHC	0.078	J	0.040	MDL	0.18	PQL	ug/Kg	J	Z, S
ENDOSULFAN II	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	L
HEPTACHLOR	0.12	J	0.067	MDL	0.18	PQL	ug/Kg	J	Z, S

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
4,4'-DDD	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
4,4'-DDE	0.18	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z, S
4,4'-DDT	0.62		0.070	MDL	0.36	PQL	ug/Kg	J	S
ALDRIN	0.070	U	0.070	MDL	0.17	PQL	ug/Kg	R	S
ALPHA-BHC	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	R	S
BETA-BHC	0.16	U	0.16	MDL	0.17	PQL	ug/Kg	R	S
Chlordane	0.84	U	0.84	MDL	3.6	PQL	ug/Kg	R	S
DELTA-BHC	0.81		0.038	MDL	0.17	PQL	ug/Kg	J	S
DIELDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDOSULFAN I	0.046	U	0.046	MDL	0.17	PQL	ug/Kg	R	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	1.3		0.036	MDL	0.17	PQL	ug/Kg	J	S
HEPTACHLOR	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.036	U	0.036	MDL	0.17	PQL	ug/Kg	R	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.7	PQL	ug/Kg	R	S
MIREX	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-021-SIV-SD-0.0-0.5 ***Collected:*** 12/15/2010 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
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	R	S

Sample ID: SL-131-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
ENDOSULFAN II	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	L

Sample ID: SL-132-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:05:00 ***Analysis Type:*** DL-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	1.7	U	1.7	MDL	8.8	PQL	ug/Kg	UJ	L

Sample ID: SL-132-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEPTACHLOR	0.36	J	0.31	MDL	0.86	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 10:55:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	1.4	U	1.4	MDL	7.3	PQL	ug/Kg	UJ	L

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
ALPHA-BHC	0.073	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z, S
DELTA-BHC	0.054	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z, S
ENDOSULFAN II	0.18	U	0.18	MDL	0.36	PQL	ug/Kg	UJ	L

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.73	U	0.73	MDL	3.8	PQL	ug/Kg	UJ	L
gamma-BHC (Lindane)	0.87	J	0.38	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: DE040 **Laboratory: LL**

EDD Filename: PrepDE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:50:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	L

Sample ID: SL-149-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
4,4'-DDD	0.19	U	0.19	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDE	0.25	U	0.25	MDL	0.35	PQL	ug/Kg	UJ	S
4,4'-DDT	1.3	U	1.3	MDL	1.3	PQL	ug/Kg	UJ	S
ALDRIN	0.069	U	0.069	MDL	0.17	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
BETA-BHC	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	UJ	S
Chlordane	0.84	U	0.84	MDL	3.5	PQL	ug/Kg	UJ	S
DELTA-BHC	0.038	U	0.038	MDL	0.17	PQL	ug/Kg	UJ	S
DIELDRIN	0.85	U	0.85	MDL	0.85	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.046	U	0.046	MDL	0.17	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.069	U	0.069	MDL	0.35	PQL	ug/Kg	UJ	L, S
ENDOSULFAN SULFATE	0.069	U	0.069	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN	0.11	U	0.11	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.19	U	0.19	MDL	0.35	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.069	U	0.069	MDL	0.35	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.035	U	0.035	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.12	U	0.12	MDL	0.17	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.35	U	0.35	MDL	1.7	PQL	ug/Kg	UJ	S
MIREX	0.069	U	0.069	MDL	0.35	PQL	ug/Kg	UJ	S
TOXAPHENE	2.3	U	2.3	MDL	6.9	PQL	ug/Kg	UJ	S

Sample ID: SL-150-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
BETA-BHC	0.078	J	0.063	MDL	0.17	PQL	ug/Kg	J	Z
DELTA-BHC	0.059	J	0.038	MDL	0.17	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.069	U	0.069	MDL	0.36	PQL	ug/Kg	UJ	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.12	U	0.12	MDL	0.39	PQL	ug/Kg	UJ	L

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***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	0.098	U	0.098	MDL	0.36	PQL	ug/Kg	UJ	L
ENDRIN	0.10	J	0.069	MDL	0.36	PQL	ug/Kg	J	Z

Sample ID: SL-156-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:32:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	1.4	U	1.4	MDL	7.3	PQL	ug/Kg	UJ	L

Sample ID: SL-181-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:26:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.045	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	UJ	L

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	1.0	U	1.0	MDL	1.0	PQL	ug/Kg	R	S
4,4'-DDE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	R	S
4,4'-DDT	1.1	U	1.1	MDL	1.1	PQL	ug/Kg	R	S
ALDRIN	0.072	U	0.072	MDL	0.18	PQL	ug/Kg	R	S
ALPHA-BHC	0.056	U	0.056	MDL	0.18	PQL	ug/Kg	R	S
Chlordane	0.87	U	0.87	MDL	3.7	PQL	ug/Kg	R	S
DELTA-BHC	0.039	U	0.039	MDL	0.18	PQL	ug/Kg	R	S
DIELDRIN	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	R	S
ENDOSULFAN I	0.048	U	0.048	MDL	0.18	PQL	ug/Kg	R	S
ENDOSULFAN II	0.17	U	0.17	MDL	0.37	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	R	S
ENDRIN	0.072	U	0.072	MDL	0.37	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	1.6	U	1.6	MDL	1.6	PQL	ug/Kg	R	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-203-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:00:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDRIN KETONE	0.17	U	0.17	MDL	0.37	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.059	U	0.059	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR	0.21	U	0.21	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	R	S
MIREX	2.2	U	2.2	MDL	2.2	PQL	ug/Kg	R	S
TOXAPHENE	2.4	U	2.4	MDL	7.2	PQL	ug/Kg	R	S

Sample ID: SL-204-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:51:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ENDOSULFAN II	0.35	U	0.35	MDL	1.8	PQL	ug/Kg	UJ	L

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.056	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z
ENDOSULFAN II	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	UJ	L
HEPTACHLOR	0.17	J	0.067	MDL	0.18	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
AROCLOR 1254	1.1	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
Aroclor 5460	1.3	J	1.1	MDL	3.5	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 10:55:00 ***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	17		0.69	MDL	3.6	PQL	ug/Kg	J	S
AROCLOR 1260	9.4		0.69	MDL	3.6	PQL	ug/Kg	J	S

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:13:00 ***Analysis Type:*** REA ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	17	J	11	MDL	37	PQL	ug/Kg	J	Z

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1260	9.7	J	3.7	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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 1260	3.0		0.34	MDL	1.8	PQL	ug/Kg	J	S
Aroclor 5460	5.0		1.0	MDL	3.4	PQL	ug/Kg	J	S

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***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	26		0.76	MDL	3.9	PQL	ug/Kg	J	S
AROCLOR 1260	38		0.76	MDL	3.9	PQL	ug/Kg	J	S

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***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	3.5		0.34	MDL	1.8	PQL	ug/Kg	J	S
AROCLOR 1260	1.8		0.34	MDL	1.8	PQL	ug/Kg	J	S

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	2.9	J	1.1	MDL	3.6	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: DE040 Laboratory: LL

EDD Filename: PrepDE040_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** SO

Sample ID: SL-204-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:51:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1248	1.1	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *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	0.67	J	0.37	MDL	1.9	PQL	ug/Kg	J	Z
Aroclor 5460	3.0	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z

Method Category: SVOA **Method:** 8151A **Matrix:** SO

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *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

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L
MCPP	200	J	83	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-132-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:05:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DB	7.2		0.70	MDL	1.9	PQL	ug/Kg	J	Q
DINOSEB	0.90	U	0.90	MDL	2.7	PQL	ug/Kg	R	L
MCPA	180	J	86	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-134-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L
MCPA	170	J	80	MDL	260	PQL	ug/Kg	J	Z
MCPP	200	J	79	MDL	260	PQL	ug/Kg	J	Z

Sample ID: SL-135-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
DICAMBA	0.60	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-136-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
2,4,5-T	0.14	J	0.090	MDL	0.19	PQL	ug/Kg	J	Z
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L
MCPP	110	J	82	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-150-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-153-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 2:08:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L

Sample ID: SL-155-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 1:41:00 **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	0.15	J	0.086	MDL	0.18	PQL	ug/Kg	J	Z
DICAMBA	0.48	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z
DICHLOROPROP	1.2	J	0.84	MDL	1.8	PQL	ug/Kg	J	Z, L
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-156-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 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
2,4-D	2.2	J	1.3	MDL	3.9	PQL	ug/Kg	J	Z
DICAMBA	0.80	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DICHLOROPROP	0.97	J	0.86	MDL	1.8	PQL	ug/Kg	J	Z, L
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-181-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 3:26:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.87	U	0.87	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-203-SA5B-SS-0.0-0.5 **Collected:** 12/15/2010 3:00:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	3.7	J	1.3	MDL	3.9	PQL	ug/Kg	J	Z
DICAMBA	0.47	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DICHLOROPROP	22		0.87	MDL	1.9	PQL	ug/Kg	J	L
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: DE040 Laboratory: LL

EDD Filename: PrepDE040_v1 eQAPP Name: CDM_SSFL_110509

Method Category: SVOA **Method:** 8151A **Matrix:** SO

Sample ID: SL-204-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:51:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 20

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	17	U	17	MDL	51	PQL	ug/Kg	R	L

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

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

Sample ID: SED-016-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *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	370	PQL	ug/Kg	J	Z

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	24	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	35	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-132-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:05:00 *Analysis Type:* RES-ACID *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-DINITROPHENOL	3800	U	3800	MDL	11000	PQL	ug/Kg	R	Q
ANILINE	940	U	940	MDL	2800	PQL	ug/Kg	R	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-132-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZIDINE	6600	U	6600	MDL	19000	PQL	ug/Kg	R	Q
HEXACHLOROCYCLOPENTADIENE	940	U	940	MDL	2800	PQL	ug/Kg	R	Q

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	19	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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-METHYLNAPHTHALENE	71	J	19	MDL	190	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	67	J	19	MDL	190	PQL	ug/Kg	J	Z
ANTHRACENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	85	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	73	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	92	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	46	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	44	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZOIC ACID	490	J	190	MDL	560	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	300	J	19	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	110	J	19	MDL	190	PQL	ug/Kg	J	Z
DIBENZOFURAN	50	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	150	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	36	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENOL	20	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	170	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	170	J	17	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-150-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	48	J	18	MDL	350	PQL	ug/Kg	J	Z
FLUORANTHENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	22	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***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(A)PYRENE	19	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	51	J	19	MDL	380	PQL	ug/Kg	J	Z
Di-n-butylphthalate	23	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	20	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	22	J	19	MDL	190	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***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	31	J	17	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-203-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:00:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CARBAZOLE	25	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-204-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:51:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	19	J	18	MDL	180	PQL	ug/Kg	J	Z

Sample ID: SL-257-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:25:00 ***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(A)ANTHRACENE	30	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	26	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	37	J	19	MDL	190	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-257-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:25:00 *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	40	J	19	MDL	370	PQL	ug/Kg	J	Z
CHRYSENE	51	J	19	MDL	190	PQL	ug/Kg	J	Z
FLUORANTHENE	50	J	19	MDL	190	PQL	ug/Kg	J	Z
PHENANTHRENE	51	J	19	MDL	190	PQL	ug/Kg	J	Z
PYRENE	63	J	19	MDL	190	PQL	ug/Kg	J	Z

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

Sample ID: SED-018-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
ANTHRACENE	0.65	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	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	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SED-021-SIV-SD-0.0-0.5 *Collected:* 12/15/2010 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
CHRYSENE	0.62	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-131-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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
BENZO(B)FLUORANTHENE	0.95	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.84	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-132-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 11:05:00 *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	22	J	19	MDL	47	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	24	J	19	MDL	47	PQL	ug/Kg	J	Z
CHRYSENE	29	J	9.4	MDL	47	PQL	ug/Kg	J	Z
FLUORANTHENE	22	J	19	MDL	47	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-132-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:05:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PYRENE	25	J	19	MDL	47	PQL	ug/Kg	J	Z

Sample ID: SL-133-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 10:55:00 ***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	44	J	36	MDL	89	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	52	J	36	MDL	89	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	39	J	36	MDL	89	PQL	ug/Kg	J	Z

Sample ID: SL-134-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 10:55:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.0	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	0.81	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.80	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.7	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.97	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	1.7	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.2	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-135-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 11:13:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	1.9	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	4.6	J	3.7	MDL	9.3	PQL	ug/Kg	J	Z

Sample ID: SL-136-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:50:00 ***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	6.4	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.8	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	6.8	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
FLUORANTHENE	8.0	J	3.7	MDL	9.1	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-136-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:50:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
PHENANTHRENE	4.4	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z
PYRENE	7.5	J	3.7	MDL	9.1	PQL	ug/Kg	J	Z

Sample ID: SL-149-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 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
1-METHYLNAPHTHALENE	0.93	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	0.91	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.6	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	0.94	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-150-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 3:10:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	4.5	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	1.8	J	1.8	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	6.6	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	7.1	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.3	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	5.1	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z
PHENANTHRENE	7.5	J	3.5	MDL	8.8	PQL	ug/Kg	J	Z

Sample ID: SL-153-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 2:08:00 ***Analysis Type:*** RES ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	5.0	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	6.4	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	6.1	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.4	J	3.8	MDL	9.6	PQL	ug/Kg	J	Z

Sample ID: SL-155-SA5B-SS-0.0-0.5 ***Collected:*** 12/15/2010 1:41:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.2	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: DE040 **Laboratory:** LL

EDD Filename: PrepDE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-155-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 1:41:00 *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	1.3	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
FLUORENE	0.92	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.70	MDL	1.7	PQL	ug/Kg	J	Z

Sample ID: SL-156-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 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	9.6	J	6.4	MDL	19	PQL	ug/Kg	J	Z

Sample ID: SL-181-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(B)FLUORANTHENE	0.93	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.79	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
FLUORANTHENE	0.94	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	0.78	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	0.84	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-203-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:00:00 *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	14	J	6.5	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-204-SA5B-SS-0.0-0.5 *Collected:* 12/15/2010 3:51:00 *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	4.9	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
CHRYSENE	4.2	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
FLUORANTHENE	8.2	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
PHENANTHRENE	5.1	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: PrepDE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: **SVOA**

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

Sample ID: **SL-257-SA5B-SS-0.0-0.5** ***Collected:*** **12/15/2010 1:25:00** ***Analysis Type:*** **RES-BASE/NEUTRAL** ***Dilution:*** **5**

Analyte	*Lab Result*	*Lab Qual*	*DL*	*DL Type*	*RL*	*RL Type*	*Units*	*Data Review Qual*	*Reason Code*
ANTHRACENE	4.1	J	1.9	MDL	9.3	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: PrepDE040_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: DE040 **Laboratory: LL**

EDD Filename: PrepDE040_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: DE040 **Laboratory: LL**

EDD Filename: PrepDE040_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

DE040

Method Blank Outlier Report

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35408AB221227	12/29/2010 12:27:00 PM	CALCIUM PHOSPHORUS STRONTIUM TIN	13.6 mg/Kg 2.33 mg/Kg 0.0814 mg/Kg 1.32 mg/Kg	SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5
P35408AB221323	12/30/2010 1:23:00 PM	ALUMINUM IRON	15.3 mg/Kg 5.87 mg/Kg	SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-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-016-SIV-SD-0.0-0.5(RES)	TIN	2.59 mg/Kg	2.59U mg/Kg
SED-018-SIV-SD-0.0-0.5(RES)	TIN	2.55 mg/Kg	2.55U mg/Kg
SED-021-SIV-SD-0.0-0.5(RES)	TIN	2.17 mg/Kg	2.17U mg/Kg
SL-131-SA5B-SS-0.0-0.5(RES)	TIN	2.49 mg/Kg	2.49U mg/Kg
SL-132-SA5B-SS-0.0-0.5(RES)	TIN	2.60 mg/Kg	2.60U mg/Kg
SL-133-SA5B-SS-0.0-0.5(RES)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-134-SA5B-SS-0.0-0.5(RES)	TIN	2.32 mg/Kg	2.32U mg/Kg
SL-135-SA5B-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-136-SA5B-SS-0.0-0.5(RES)	TIN	2.25 mg/Kg	2.25U mg/Kg
SL-149-SA5B-SS-0.0-0.5(RES)	TIN	2.46 mg/Kg	2.46U mg/Kg
SL-150-SA5B-SS-0.0-0.5(RES)	TIN	2.89 mg/Kg	2.89U mg/Kg
SL-153-SA5B-SS-0.0-0.5(RES)	TIN	2.54 mg/Kg	2.54U mg/Kg
SL-155-SA5B-SS-0.0-0.5(RES)	TIN	2.58 mg/Kg	2.58U mg/Kg
SL-156-SA5B-SS-0.0-0.5(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SL-181-SA5B-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-203-SA5B-SS-0.0-0.5(RES)	TIN	2.62 mg/Kg	2.62U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE040 Laboratory: LL

EDD Filename: DE040_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-204-SA5B-SS-0.0-0.5(RES)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-257-SA5B-SS-0.0-0.5(RES)	TIN	3.01 mg/Kg	3.01U mg/Kg

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE040 Laboratory: LL

EDD Filename: DE040_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-132-SA5B-SS-0.0-0.5MSD (SL-132-SA5B-SS-0.0-0.5)	AROCLOR 1016	-	172	29.00-146.00	-	AROCLOR 1016, 1221, 1232	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-133-SA5B-SS-0.0-0.5MS SL-133-SA5B-SS-0.0-0.5MSD (SL-133-SA5B-SS-0.0-0.5)	DIELDRIN	583	621	19.00-154.00	-	DIELDRIN	No Qual Diluted Out
SL-133-SA5B-SS-0.0-0.5MS SL-133-SA5B-SS-0.0-0.5MSD (SL-133-SA5B-SS-0.0-0.5)	4,4'-DDD	0	0	16.00-163.00	-	4,4'-DDD	No Qual Diluted Out
	4,4'-DDE	-39337	-29706	18.00-161.00	53 (50.00)	4,4'-DDE	
	4,4'-DDT	-27483	-17011	10.00-176.00	-	4,4'-DDT	
	ALDRIN	0	0	16.00-126.00	-	ALDRIN	
	ALPHA-BHC	0	0	10.00-129.00	-	ALPHA-BHC	
	BETA-BHC	0	0	14.00-147.00	-	BETA-BHC	
	DELTA-BHC	0	0	23.00-140.00	-	DELTA-BHC	
	ENDOSULFAN I	0	0	16.00-137.00	-	ENDOSULFAN I	
	ENDOSULFAN II	0	0	28.00-154.00	-	ENDOSULFAN II	
	ENDOSULFAN SULFATE	0	398	21.00-160.00	200 (50.00)	ENDOSULFAN SULFATE	
	ENDRIN	0	0	11.00-149.00	-	ENDRIN	
	ENDRIN ALDEHYDE	0	576	10.00-148.00	200 (35.00)	ENDRIN ALDEHYDE	
	ENDRIN KETONE	0	0	22.00-165.00	-	ENDRIN KETONE	
	gamma-BHC (Lindane)	0	0	10.00-140.00	-	gamma-BHC (Lindane)	
	HEPTACHLOR	0	0	13.00-126.00	-	HEPTACHLOR	
	HEPTACHLOR EPOXIDE	0	0	13.00-157.00	-	HEPTACHLOR EPOXIDE	
	METHOXYCHLOR	227	0	32.00-147.00	200 (50.00)	METHOXYCHLOR	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-132-SA5B-SS-0.0-0.5MS (SL-132-SA5B-SS-0.0-0.5)	2,4-DB	14	-	20.00-170.00	-	2,4-DB	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE040 | Laboratory: LL

EDD Filename: DE040_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-133-SA5B-SS-0.0-0.5MS **SL-133-SA5B-SS-0.0-0.5MSD** (SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5)	ARSENIC CHROMIUM VANADIUM	- 143 147	141 134 -	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ARSENIC CHROMIUM VANADIUM	J(all detects)
SL-133-SA5B-SS-0.0-0.5MS **SL-133-SA5B-SS-0.0-0.5MSD** (SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5)	ANTIMONY LEAD ZINC	48 323 536	49 - -	75.00-125.00 75.00-125.00 75.00-125.00	- 44 (20.00) 36 (20.00)	ANTIMONY LEAD ZINC	J(all detects) UJ(all non-detects) Zn No Qual %R, >4x
SL-133-SA5B-SS-0.0-0.5MS (SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5)	BARIUM	212	-	75.00-125.00	-	BARIUM	No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_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-132-SA5B-SS-0.0-0.5MS	ALUMINUM	933	702	75.00-125.00	-	ALUMINUM	
SL-132-SA5B-SS-0.0-0.5MSD	CALCIUM	214	-	75.00-125.00	-	CALCIUM	
(SED-016-SIV-SD-0.0-0.5	POTASSIUM	137	-	75.00-125.00	-	POTASSIUM	
SED-018-SIV-SD-0.0-0.5	TITANIUM	239	141	75.00-125.00	-	TITANIUM	
SED-021-SIV-SD-0.0-0.5							
SL-131-SA5B-SS-0.0-0.5							
SL-132-SA5B-SS-0.0-0.5							
SL-133-SA5B-SS-0.0-0.5							
SL-134-SA5B-SS-0.0-0.5							
SL-135-SA5B-SS-0.0-0.5							J(all detects)
SL-136-SA5B-SS-0.0-0.5							
SL-149-SA5B-SS-0.0-0.5							Al, Ca, Ti
SL-150-SA5B-SS-0.0-0.5							No Qual, >4x
SL-153-SA5B-SS-0.0-0.5							
SL-155-SA5B-SS-0.0-0.5							
SL-156-SA5B-SS-0.0-0.5							
SL-181-SA5B-SS-0.0-0.5							
SL-203-SA5B-SS-0.0-0.5							
SL-204-SA5B-SS-0.0-0.5							
SL-257-SA5B-SS-0.0-0.5)							
SL-132-SA5B-SS-0.0-0.5MS	IRON	889	-1018	75.00-125.00	-	IRON	
SL-132-SA5B-SS-0.0-0.5MSD	MAGNESIUM	199	-40	75.00-125.00	-	MAGNESIUM	
(SED-016-SIV-SD-0.0-0.5							
SED-018-SIV-SD-0.0-0.5							
SED-021-SIV-SD-0.0-0.5							
SL-131-SA5B-SS-0.0-0.5							
SL-132-SA5B-SS-0.0-0.5							
SL-133-SA5B-SS-0.0-0.5							
SL-134-SA5B-SS-0.0-0.5							
SL-135-SA5B-SS-0.0-0.5							No Qual, >4x
SL-136-SA5B-SS-0.0-0.5							
SL-149-SA5B-SS-0.0-0.5							
SL-150-SA5B-SS-0.0-0.5							
SL-153-SA5B-SS-0.0-0.5							
SL-155-SA5B-SS-0.0-0.5							
SL-156-SA5B-SS-0.0-0.5							
SL-181-SA5B-SS-0.0-0.5							
SL-203-SA5B-SS-0.0-0.5							
SL-204-SA5B-SS-0.0-0.5							
SL-257-SA5B-SS-0.0-0.5)							
SL-132-SA5B-SS-0.0-0.5MS	MANGANESE	193	-	75.00-125.00	21 (20.00)	MANGANESE	
SL-132-SA5B-SS-0.0-0.5MSD	PHOSPHORUS	250	57	75.00-125.00	37 (20.00)	PHOSPHORUS	
(SED-016-SIV-SD-0.0-0.5							
SED-018-SIV-SD-0.0-0.5							
SED-021-SIV-SD-0.0-0.5							
SL-131-SA5B-SS-0.0-0.5							
SL-132-SA5B-SS-0.0-0.5							
SL-133-SA5B-SS-0.0-0.5							
SL-134-SA5B-SS-0.0-0.5							
SL-135-SA5B-SS-0.0-0.5							J(all detects)
SL-136-SA5B-SS-0.0-0.5							UJ(all non-detects)
SL-149-SA5B-SS-0.0-0.5							
SL-150-SA5B-SS-0.0-0.5							Mn No Qual %R, >4x
SL-153-SA5B-SS-0.0-0.5							
SL-155-SA5B-SS-0.0-0.5							
SL-156-SA5B-SS-0.0-0.5							
SL-181-SA5B-SS-0.0-0.5							
SL-203-SA5B-SS-0.0-0.5							
SL-204-SA5B-SS-0.0-0.5							
SL-257-SA5B-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_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-132-SA5B-SS-0.0-0.5MS SL-132-SA5B-SS-0.0-0.5MSD (SL-132-SA5B-SS-0.0-0.5)	2-NITROANILINE	-	132	67.00-125.00	-	2-NITROANILINE	J(all detects)
	3,5-Dimethylphenol	146	150	70.00-130.00	-	3,5-Dimethylphenol	
	BENZOIC ACID	178	175	10.00-173.00	-	BENZOIC ACID	
	BIS(2-CHLOROETHOXY)METHA	-	108	75.00-104.00	-	BIS(2-CHLOROETHOXY)METH	
	BIS(2-ETHYLHEXYL)PHTHALAT	132	138	63.00-122.00	-	BIS(2-ETHYLHEXYL)PHTHALA	
	Butylbenzylphthalate	-	142	73.00-134.00	-	Butylbenzylphthalate	
	Di-n-octylphthalate	146	158	56.00-126.00	-	Di-n-octylphthalate	
	ISOPHORONE	-	105	73.00-102.00	-	ISOPHORONE	
SL-132-SA5B-SS-0.0-0.5MS SL-132-SA5B-SS-0.0-0.5MSD (SL-132-SA5B-SS-0.0-0.5)	2,4-DINITROPHENOL	0	0	20.00-143.00	-	2,4-DINITROPHENOL	J(all detects) R(all non-detects)
	ANILINE	0	-	35.00-95.00	200 (30.00)	ANILINE	
	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	
	HEXACHLOROCYCLOPENTADI	0	0	10.00-153.00	-	HEXACHLOROCYCLOPENTAD	

Method: 8270C SIM
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-132-SA5B-SS-0.0-0.5MS SL-132-SA5B-SS-0.0-0.5MSD (SL-132-SA5B-SS-0.0-0.5)	1-METHYLNAPHTHALENE	177	145	72.00-123.00	-	1-METHYLNAPHTHALENE	No Qual, Diluted Out
	2-METHYLNAPHTHALENE	136	-	28.00-121.00	-	2-METHYLNAPHTHALENE	
	ACENAPHTHENE	127	109	63.00-105.00	-	ACENAPHTHENE	
	ANTHRACENE	138	-	46.00-136.00	-	ANTHRACENE	
	BENZO(A)ANTHRACENE	206	176	39.00-144.00	-	BENZO(A)ANTHRACENE	
	BENZO(B)FLUORANTHENE	188	-	43.00-155.00	-	BENZO(B)FLUORANTHENE	
	CHRYSENE	316	-	29.00-156.00	69 (30.00)	CHRYSENE	
	FLUORANTHENE	924	169	26.00-166.00	125 (30.00)	FLUORANTHENE	
	FLUORENE	125	-	45.00-121.00	-	FLUORENE	
	PHENANTHRENE	515	198	12.00-165.00	47 (30.00)	PHENANTHRENE	
	PYRENE	668	-	15.00-153.00	113 (30.00)	PYRENE	
SL-132-SA5B-SS-0.0-0.5MS SL-132-SA5B-SS-0.0-0.5MSD (SL-132-SA5B-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	0	0	39.00-167.00	-	BIS(2-ETHYLHEXYL)PHTHALA	No Qual, Diluted Out
	Butylbenzylphthalate	0	0	73.00-140.00	-	Butylbenzylphthalate	
	Diethylphthalate	0	0	87.00-131.00	-	Diethylphthalate	
	Dimethylphthalate	0	0	74.00-118.00	-	Dimethylphthalate	
	Di-n-butylphthalate	0	0	78.00-160.00	-	Di-n-butylphthalate	
	Di-n-octylphthalate	0	0	40.00-192.00	-	Di-n-octylphthalate	

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE040 Laboratory: LL

EDD Filename: DE040_v1 eQAPP Name: CDM_SSFL_110509

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-133-SA5B-SS-0.0-0.5DUP	ANTIMONY	74	20.00	
(SED-016-SIV-SD-0.0-0.5	CHROMIUM	50	20.00	
SED -018-SIV-SD-0.0-0.5	MOLYBDENUM	23	20.00	
SED -021-SIV-SD-0.0-0.5	NICKEL	28	20.00	
SL -131-SA5B-SS-0.0-0.5				
SL -132-SA5B-SS-0.0-0.5				
SL -133-SA5B-SS-0.0-0.5				
SL -134-SA5B-SS-0.0-0.5				
SL -135-SA5B-SS-0.0-0.5				J (all detects)
SL -136-SA5B-SS-0.0-0.5				UJ (all non-detects)
SL -149-SA5B-SS-0.0-0.5				
SL -150-SA5B-SS-0.0-0.5				Sb, Mo No Qual
SL -153-SA5B-SS-0.0-0.5				OK by difference
SL -155-SA5B-SS-0.0-0.5				
SL -156-SA5B-SS-0.0-0.5				
SL -181-SA5B-SS-0.0-0.5				
SL -203-SA5B-SS-0.0-0.5				
SL -204-SA5B-SS-0.0-0.5				
SL -257-SA5B-SS-0.0-0.5)				

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-149-SA5B-SS-0.0-0.5DUP	FLUORIDE	51	20.00	
(SL-136-SA5B-SS-0.0-0.5				
SL -149-SA5B-SS-0.0-0.5				
SL -150-SA5B-SS-0.0-0.5				
SL -156-SA5B-SS-0.0-0.5				No Qual
SL -181-SA5B-SS-0.0-0.5				OK by difference
SL -203-SA5B-SS-0.0-0.5				
SL -204-SA5B-SS-0.0-0.5				
SL -257-SA5B-SS-0.0-0.5)				

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-204-SA5B-SS-0.0-0.5DUP (SED-016-SIV-SD-0.0-0.5 SED -018-SIV-SD-0.0-0.5 SED -021-SIV-SD-0.0-0.5 SL -131-SA5B-SS-0.0-0.5 SL -132-SA5B-SS-0.0-0.5 SL -133-SA5B-SS-0.0-0.5 SL -134-SA5B-SS-0.0-0.5 SL -135-SA5B-SS-0.0-0.5 SL -136-SA5B-SS-0.0-0.5 SL -149-SA5B-SS-0.0-0.5 SL -150-SA5B-SS-0.0-0.5 SL -153-SA5B-SS-0.0-0.5 SL -155-SA5B-SS-0.0-0.5 SL -156-SA5B-SS-0.0-0.5 SL -181-SA5B-SS-0.0-0.5 SL -203-SA5B-SS-0.0-0.5 SL -204-SA5B-SS-0.0-0.5 SL -257-SA5B-SS-0.0-0.5)	HEXAVALENT CHROMIUM	99	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-132-SA5B-SS-0.0-0.5DUP (SED-016-SIV-SD-0.0-0.5 SED -018-SIV-SD-0.0-0.5 SED -021-SIV-SD-0.0-0.5 SL -131-SA5B-SS-0.0-0.5 SL -132-SA5B-SS-0.0-0.5 SL -133-SA5B-SS-0.0-0.5 SL -134-SA5B-SS-0.0-0.5 SL -135-SA5B-SS-0.0-0.5 SL -153-SA5B-SS-0.0-0.5 SL -155-SA5B-SS-0.0-0.5)	FLUORIDE	200	20.00	No Qual OK by difference

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-132-SA5B-SS-0.0-0.5DUP	IRON	31	20.00	
(SED-016-SIV-SD-0.0-0.5	LITHIUM	27	20.00	
SED -018-SIV-SD-0.0-0.5	MANGANESE	44	20.00	
SED -021-SIV-SD-0.0-0.5	STRONTIUM	31	20.00	
SL -131-SA5B-SS-0.0-0.5				
SL -132-SA5B-SS-0.0-0.5				
SL -133-SA5B-SS-0.0-0.5				
SL -134-SA5B-SS-0.0-0.5				
SL -135-SA5B-SS-0.0-0.5				
SL -136-SA5B-SS-0.0-0.5				J(all detects)
SL -149-SA5B-SS-0.0-0.5				UJ(all non-detects)
SL -150-SA5B-SS-0.0-0.5				
SL -153-SA5B-SS-0.0-0.5				
SL -155-SA5B-SS-0.0-0.5				
SL -156-SA5B-SS-0.0-0.5				
SL -181-SA5B-SS-0.0-0.5				
SL -203-SA5B-SS-0.0-0.5				
SL -204-SA5B-SS-0.0-0.5				
SL -257-SA5B-SS-0.0-0.5)				

Method: 7471A
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-132-SA5B-SS-0.0-0.5DUP	MERCURY	200	20.00	
(SED-016-SIV-SD-0.0-0.5				
SED -018-SIV-SD-0.0-0.5				
SED -021-SIV-SD-0.0-0.5				
SL -131-SA5B-SS-0.0-0.5				
SL -132-SA5B-SS-0.0-0.5				
SL -133-SA5B-SS-0.0-0.5				
SL -134-SA5B-SS-0.0-0.5				
SL -135-SA5B-SS-0.0-0.5				
SL -136-SA5B-SS-0.0-0.5				No Qual
SL -149-SA5B-SS-0.0-0.5				OK by difference
SL -150-SA5B-SS-0.0-0.5				
SL -153-SA5B-SS-0.0-0.5				
SL -155-SA5B-SS-0.0-0.5				
SL -156-SA5B-SS-0.0-0.5				
SL -181-SA5B-SS-0.0-0.5				
SL -203-SA5B-SS-0.0-0.5				
SL -204-SA5B-SS-0.0-0.5				
SL -257-SA5B-SS-0.0-0.5)				

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE040 Laboratory: LL

EDD Filename: DE040_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03558AQ240137A (SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5)	ENDOSULFAN II	60	-	63.00-127.00	-	ENDOSULFAN II	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
P03614AQ241108A (SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5)	DICHLOROPROP	157	-	60.00-141.00	-	DICHLOROPROP	J(all detects)
P03614AQ241108A (SED-016-SIV-SD-0.0-0.5 SED-018-SIV-SD-0.0-0.5 SED-021-SIV-SD-0.0-0.5 SL-131-SA5B-SS-0.0-0.5 SL-132-SA5B-SS-0.0-0.5 SL-133-SA5B-SS-0.0-0.5 SL-134-SA5B-SS-0.0-0.5 SL-135-SA5B-SS-0.0-0.5 SL-136-SA5B-SS-0.0-0.5 SL-149-SA5B-SS-0.0-0.5 SL-150-SA5B-SS-0.0-0.5 SL-153-SA5B-SS-0.0-0.5 SL-155-SA5B-SS-0.0-0.5 SL-156-SA5B-SS-0.0-0.5 SL-181-SA5B-SS-0.0-0.5 SL-203-SA5B-SS-0.0-0.5 SL-204-SA5B-SS-0.0-0.5 SL-257-SA5B-SS-0.0-0.5)	DINOSEB	7	-	10.00-136.00	-	DINOSEB	J(all detects) R(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: DE040 Laboratory: LL

EDD Filename: DE040_v1 eQAPP Name: CDM_SSFL_110509

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	*Compound*	*LCS %R*	*LCSD %R*	*%R Limits*	*RPD (Limits)*	*Affected Compounds*	*Flag*

Surrogate Outlier Report

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-018-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	217	20.00-120.00	All Target Analytes	J (all detects)
SED-021-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-134-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	159	20.00-120.00	All Target Analytes	J(all detects)
SL-135-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	No Qual Diluted Out
SL-149-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-203-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-203-SA5B-SS-0.0-0.5	TETRACHLORO-M-XYLENE	41	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SL-204-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	No Qual Diluted Out

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-133-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	21 17	45.00-120.00 53.00-139.00	All Target Analytes	No Qual Diluted Out
SL-134-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	192 161	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)
SL-135-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	145	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-149-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	121	45.00-120.00	All Target Analytes	J(all detects)
SL-153-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	188	45.00-120.00	All Target Analytes	J(all detects)
SL-155-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	143 148	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 Laboratory: LL

EDD Filename: DE040_v1 eQAPP Name: CDM_SSFL_110509

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-133-SA5B-SS-0.0-0.5	FLUORIDE	J	1.0	1.1	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-016-SIV-SD-0.0-0.5	BORON	J	4.30	5.58	PQL	mg/Kg	J (all detects)
	SODIUM	J	89.4	112	PQL	mg/Kg	
	TIN	J	2.59	11.2	PQL	mg/Kg	
	Zirconium	J	1.30	5.58	PQL	mg/Kg	
SED-018-SIV-SD-0.0-0.5	SODIUM	J	71.2	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.55	11.0	PQL	mg/Kg	
	Zirconium	J	1.38	5.49	PQL	mg/Kg	
SED-021-SIV-SD-0.0-0.5	BORON	J	3.56	5.17	PQL	mg/Kg	J (all detects)
	SODIUM	J	63.5	103	PQL	mg/Kg	
	TIN	J	2.17	10.3	PQL	mg/Kg	
SL-131-SA5B-SS-0.0-0.5	TIN	J	2.49	10.0	PQL	mg/Kg	J (all detects)
	Zirconium	J	3.08	5.00	PQL	mg/Kg	
SL-132-SA5B-SS-0.0-0.5	TIN	J	2.60	10.9	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.36	5.47	PQL	mg/Kg	
SL-133-SA5B-SS-0.0-0.5	TIN	J	2.24	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.92	5.31	PQL	mg/Kg	
SL-134-SA5B-SS-0.0-0.5	BORON	J	4.96	5.15	PQL	mg/Kg	J (all detects)
	TIN	J	2.32	10.3	PQL	mg/Kg	
	Zirconium	J	1.38	5.15	PQL	mg/Kg	
SL-135-SA5B-SS-0.0-0.5	TIN	J	2.56	10.8	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.84	5.39	PQL	mg/Kg	
SL-136-SA5B-SS-0.0-0.5	BORON	J	4.64	5.48	PQL	mg/Kg	J (all detects)
	TIN	J	2.25	11.0	PQL	mg/Kg	
	Zirconium	J	1.39	5.48	PQL	mg/Kg	
SL-149-SA5B-SS-0.0-0.5	TIN	J	2.46	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.39	5.17	PQL	mg/Kg	
SL-150-SA5B-SS-0.0-0.5	TIN	J	2.89	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	0.993	5.16	PQL	mg/Kg	
SL-153-SA5B-SS-0.0-0.5	TIN	J	2.54	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.00	5.54	PQL	mg/Kg	
SL-155-SA5B-SS-0.0-0.5	TIN	J	2.58	10.3	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.99	5.17	PQL	mg/Kg	
SL-156-SA5B-SS-0.0-0.5	TIN	J	2.51	10.6	PQL	mg/Kg	J (all detects)
	Zirconium	J	2.60	5.32	PQL	mg/Kg	
SL-181-SA5B-SS-0.0-0.5	SODIUM	J	102	107	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.7	PQL	mg/Kg	
	Zirconium	J	2.27	5.33	PQL	mg/Kg	
SL-203-SA5B-SS-0.0-0.5	TIN	J	2.62	10.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	1.46	5.19	PQL	mg/Kg	
SL-204-SA5B-SS-0.0-0.5	BORON	J	4.93	5.31	PQL	mg/Kg	J (all detects)
	TIN	J	2.56	10.6	PQL	mg/Kg	
	Zirconium	J	3.02	5.31	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 **Laboratory:** LL

EDD Filename: DE040_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-257-SA5B-SS-0.0-0.5	BORON	J	5.19	5.39	PQL	mg/Kg	J (all detects)
	SODIUM	J	89.8	108	PQL	mg/Kg	
	TIN	J	3.01	10.8	PQL	mg/Kg	
	Zirconium	J	1.26	5.39	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-016-SIV-SD-0.0-0.5	SELENIUM	J	0.0957	0.438	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0265	0.109	PQL	mg/Kg	
SED-018-SIV-SD-0.0-0.5	SELENIUM	J	0.155	0.440	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0255	0.110	PQL	mg/Kg	
SED-021-SIV-SD-0.0-0.5	CADMIUM	J	0.0800	0.101	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0924	0.405	PQL	mg/Kg	
	SILVER	J	0.0170	0.101	PQL	mg/Kg	
SL-131-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0800	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.128	0.420	PQL	mg/Kg	
	SILVER	J	0.0671	0.105	PQL	mg/Kg	
SL-132-SA5B-SS-0.0-0.5	SELENIUM	J	0.130	0.442	PQL	mg/Kg	J (all detects)
	SILVER	J	0.109	0.110	PQL	mg/Kg	
SL-133-SA5B-SS-0.0-0.5	ANTIMONY	J	0.141	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.125	0.421	PQL	mg/Kg	
	SILVER	J	0.0610	0.105	PQL	mg/Kg	
SL-134-SA5B-SS-0.0-0.5	ANTIMONY	J	0.118	0.204	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.101	0.408	PQL	mg/Kg	
SL-135-SA5B-SS-0.0-0.5	ANTIMONY	J	0.207	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0906	0.440	PQL	mg/Kg	
SL-136-SA5B-SS-0.0-0.5	ANTIMONY	J	0.150	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.104	0.426	PQL	mg/Kg	
SL-149-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0979	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.130	0.418	PQL	mg/Kg	
	SILVER	J	0.0767	0.104	PQL	mg/Kg	
SL-150-SA5B-SS-0.0-0.5	ANTIMONY	J	0.139	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.421	PQL	mg/Kg	
	SILVER	J	0.0714	0.105	PQL	mg/Kg	
SL-153-SA5B-SS-0.0-0.5	ANTIMONY	J	0.143	0.226	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.117	0.452	PQL	mg/Kg	
	SILVER	J	0.108	0.113	PQL	mg/Kg	
SL-155-SA5B-SS-0.0-0.5	ANTIMONY	J	0.148	0.205	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0925	0.410	PQL	mg/Kg	
	SILVER	J	0.0459	0.102	PQL	mg/Kg	
SL-156-SA5B-SS-0.0-0.5	ANTIMONY	J	0.115	0.213	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0985	0.425	PQL	mg/Kg	
SL-181-SA5B-SS-0.0-0.5	ANTIMONY	J	0.175	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.147	0.418	PQL	mg/Kg	
	SILVER	J	0.0727	0.105	PQL	mg/Kg	
SL-203-SA5B-SS-0.0-0.5	ANTIMONY	J	0.134	0.214	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.112	0.427	PQL	mg/Kg	
	SILVER	J	0.0325	0.107	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-204-SA5B-SS-0.0-0.5	ANTIMONY	J	0.0824	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.146	0.412	PQL	mg/Kg	
	SILVER	J	0.0326	0.103	PQL	mg/Kg	
SL-257-SA5B-SS-0.0-0.5	ANTIMONY	J	0.132	0.218	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0807	0.436	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-016-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.81	1.1	PQL	mg/Kg	J (all detects)
SED-018-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.34	1.1	PQL	mg/Kg	J (all detects)
SL-132-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.73	1.1	PQL	mg/Kg	J (all detects)
SL-134-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.50	1.1	PQL	mg/Kg	J (all detects)
SL-149-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.59	1.0	PQL	mg/Kg	J (all detects)
SL-150-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.82	1.1	PQL	mg/Kg	J (all detects)
SL-155-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.47	1.0	PQL	mg/Kg	J (all detects)
SL-181-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.63	1.1	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-204-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.28	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-016-SIV-SD-0.0-0.5	MERCURY	J	0.0469	0.110	PQL	mg/Kg	J (all detects)
SED-018-SIV-SD-0.0-0.5	MERCURY	J	0.0097	0.108	PQL	mg/Kg	J (all detects)
SL-131-SA5B-SS-0.0-0.5	MERCURY	J	0.0421	0.0984	PQL	mg/Kg	J (all detects)
SL-134-SA5B-SS-0.0-0.5	MERCURY	J	0.0181	0.0999	PQL	mg/Kg	J (all detects)
SL-136-SA5B-SS-0.0-0.5	MERCURY	J	0.0387	0.108	PQL	mg/Kg	J (all detects)
SL-149-SA5B-SS-0.0-0.5	MERCURY	J	0.0199	0.101	PQL	mg/Kg	J (all detects)
SL-150-SA5B-SS-0.0-0.5	MERCURY	J	0.0135	0.104	PQL	mg/Kg	J (all detects)
SL-153-SA5B-SS-0.0-0.5	MERCURY	J	0.0513	0.111	PQL	mg/Kg	J (all detects)
SL-155-SA5B-SS-0.0-0.5	MERCURY	J	0.0084	0.103	PQL	mg/Kg	J (all detects)
SL-156-SA5B-SS-0.0-0.5	MERCURY	J	0.0880	0.103	PQL	mg/Kg	J (all detects)
SL-181-SA5B-SS-0.0-0.5	MERCURY	J	0.0128	0.107	PQL	mg/Kg	J (all detects)
SL-203-SA5B-SS-0.0-0.5	MERCURY	J	0.0451	0.104	PQL	mg/Kg	J (all detects)
SL-204-SA5B-SS-0.0-0.5	MERCURY	J	0.0060	0.0994	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-257-SA5B-SS-0.0-0.5	MERCURY	J	0.0062	0.107	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-018-SIV-SD-0.0-0.5	DELTA-BHC HEPTACHLOR	J J	0.078 0.12	0.18 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)
SED-021-SIV-SD-0.0-0.5	4,4'-DDE	J	0.18	0.36	PQL	ug/Kg	J (all detects)
SL-132-SA5B-SS-0.0-0.5	HEPTACHLOR	J	0.36	0.86	PQL	ug/Kg	J (all detects)
SL-134-SA5B-SS-0.0-0.5	ALPHA-BHC DELTA-BHC	J J	0.073 0.054	0.17 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-135-SA5B-SS-0.0-0.5	gamma-BHC (Lindane)	J	0.87	1.8	PQL	ug/Kg	J (all detects)
SL-150-SA5B-SS-0.0-0.5	BETA-BHC DELTA-BHC	J J	0.078 0.059	0.17 0.17	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-155-SA5B-SS-0.0-0.5	ENDRIN	J	0.10	0.36	PQL	ug/Kg	J (all detects)
SL-181-SA5B-SS-0.0-0.5	DELTA-BHC	J	0.045	0.18	PQL	ug/Kg	J (all detects)
SL-257-SA5B-SS-0.0-0.5	ALPHA-BHC HEPTACHLOR	J J	0.056 0.17	0.18 0.18	PQL PQL	ug/Kg ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-018-SIV-SD-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	1.1 1.1	1.9 1.9	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-131-SA5B-SS-0.0-0.5	Aroclor 5460	J	1.3	3.5	PQL	ug/Kg	J (all detects)
SL-135-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	9.7 17	19 37	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-203-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.9	3.6	PQL	ug/Kg	J (all detects)
SL-204-SA5B-SS-0.0-0.5	AROCLOR 1248	J	1.1	1.8	PQL	ug/Kg	J (all detects)
SL-257-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.67 3.0	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
SED-018-SIV-SD-0.0-0.5	MCPP	J	200	280	PQL	ug/Kg	J (all detects)
SL-132-SA5B-SS-0.0-0.5	MCPA	J	180	280	PQL	ug/Kg	J (all detects)
SL-134-SA5B-SS-0.0-0.5	MCPA MCPP	J J	170 200	260 260	PQL PQL	ug/Kg ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-135-SA5B-SS-0.0-0.5	DICAMBA	J	0.60	1.3	PQL	ug/Kg	J (all detects)
SL-136-SA5B-SS-0.0-0.5	2,4,5-T	J	0.14	0.19	PQL	ug/Kg	J (all detects)
	MCPP	J	110	270	PQL	ug/Kg	
SL-155-SA5B-SS-0.0-0.5	2,4,5-T	J	0.15	0.18	PQL	ug/Kg	J (all detects)
	DICAMBA	J	0.48	1.3	PQL	ug/Kg	
	DICHLOROPROP	J	1.2	1.8	PQL	ug/Kg	
SL-156-SA5B-SS-0.0-0.5	2,4-D	J	2.2	3.9	PQL	ug/Kg	J (all detects)
	DICAMBA	J	0.80	1.3	PQL	ug/Kg	
	DICHLOROPROP	J	0.97	1.8	PQL	ug/Kg	
SL-203-SA5B-SS-0.0-0.5	2,4-D	J	3.7	3.9	PQL	ug/Kg	J (all detects)
	DICAMBA	J	0.47	1.3	PQL	ug/Kg	

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-016-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	370	PQL	ug/Kg	J (all detects)
SED-018-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	24	370	PQL	ug/Kg	J (all detects)
SED-021-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	350	PQL	ug/Kg	J (all detects)
SL-131-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	350	PQL	ug/Kg	J (all detects)
SL-134-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	19	350	PQL	ug/Kg	J (all detects)
SL-135-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	71	190	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	67	190	PQL	ug/Kg	
	ANTHRACENE	J	21	190	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	85	190	PQL	ug/Kg	
	BENZO(A)PYRENE	J	73	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	92	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	46	190	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	44	190	PQL	ug/Kg	
	BENZOIC ACID	J	490	560	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	300	370	PQL	ug/Kg	
	CHRYSENE	J	110	190	PQL	ug/Kg	
	DIBENZOFURAN	J	50	190	PQL	ug/Kg	
	FLUORANTHENE	J	150	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	36	190	PQL	ug/Kg	
	PHENOL	J	20	190	PQL	ug/Kg	
	PYRENE	J	170	190	PQL	ug/Kg	
SL-149-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	170	350	PQL	ug/Kg	J (all detects)
SL-150-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	350	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	19	180	PQL	ug/Kg	
	PYRENE	J	22	180	PQL	ug/Kg	
SL-153-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	19	190	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	51	380	PQL	ug/Kg	
	Di-n-butylphthalate	J	23	190	PQL	ug/Kg	
	FLUORANTHENE	J	20	190	PQL	ug/Kg	
	PYRENE	J	22	190	PQL	ug/Kg	
SL-155-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	31	350	PQL	ug/Kg	J (all detects)
SL-203-SA5B-SS-0.0-0.5	CARBAZOLE	J	25	180	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-204-SA5B-SS-0.0-0.5	PYRENE	J	19	180	PQL	ug/Kg	J (all detects)
SL-257-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	30	190	PQL	ug/Kg	
	BENZO(A)PYRENE	J	26	190	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	37	190	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	26	190	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	40	370	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	51	190	PQL	ug/Kg	
	FLUORANTHENE	J	50	190	PQL	ug/Kg	
	PHENANTHRENE	J	51	190	PQL	ug/Kg	
	PYRENE	J	63	190	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-018-SIV-SD-0.0-0.5	ANTHRACENE	J	0.65	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	NAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
SED-021-SIV-SD-0.0-0.5	CHRYSENE	J	0.62	1.8	PQL	ug/Kg	J (all detects)
SL-131-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.95	1.8	PQL	ug/Kg	
	CHRYSENE	J	0.84	1.8	PQL	ug/Kg	J (all detects)
SL-132-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	22	47	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	24	47	PQL	ug/Kg	
	CHRYSENE	J	29	47	PQL	ug/Kg	J (all detects)
	FLUORANTHENE	J	22	47	PQL	ug/Kg	
	PYRENE	J	25	47	PQL	ug/Kg	
SL-133-SA5B-SS-0.0-0.5	BENZO(A)PYRENE	J	44	89	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	52	89	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	39	89	PQL	ug/Kg	
SL-134-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	0.81	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.80	1.8	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.7	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	0.97	1.8	PQL	ug/Kg	
	CHRYSENE	J	1.7	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	1.2	1.8	PQL	ug/Kg	
	PYRENE	J	1.2	1.8	PQL	ug/Kg	
SL-135-SA5B-SS-0.0-0.5	ACENAPHTHYLENE	J	1.9	9.3	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	4.6	9.3	PQL	ug/Kg	J (all detects)
SL-136-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.4	9.1	PQL	ug/Kg	
	BENZO(A)PYRENE	J	7.8	9.1	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	6.8	9.1	PQL	ug/Kg	
	FLUORANTHENE	J	8.0	9.1	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	4.4	9.1	PQL	ug/Kg	
	PYRENE	J	7.5	9.1	PQL	ug/Kg	
SL-149-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.93	1.7	PQL	ug/Kg	
	2-METHYLNAPHTHALENE	J	0.91	1.7	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.6	1.7	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.3	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	0.94	1.7	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE040 **Laboratory: LL**

EDD Filename: DE040_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-150-SA5B-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	4.5	8.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	1.8	8.8	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	6.6	8.8	PQL	ug/Kg	
	BENZO(A)PYRENE	J	7.1	8.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.3	8.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	5.1	8.8	PQL	ug/Kg	
	PHENANTHRENE	J	7.5	8.8	PQL	ug/Kg	
SL-153-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	5.0	9.6	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	6.4	9.6	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	6.1	9.6	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.4	9.6	PQL	ug/Kg	
SL-155-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	1.7	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	1.7	PQL	ug/Kg	
	FLUORENE	J	0.92	1.7	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	1.7	PQL	ug/Kg	
SL-156-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	9.6	19	PQL	ug/Kg	J (all detects)
SL-181-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.93	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.79	1.8	PQL	ug/Kg	
	FLUORANTHENE	J	0.94	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	0.78	1.8	PQL	ug/Kg	
	PYRENE	J	0.84	1.8	PQL	ug/Kg	
SL-203-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	J (all detects)
SL-204-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	4.9	8.9	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	4.2	8.9	PQL	ug/Kg	
	FLUORANTHENE	J	8.2	8.9	PQL	ug/Kg	
	PHENANTHRENE	J	5.1	8.9	PQL	ug/Kg	
SL-257-SA5B-SS-0.0-0.5	ANTHRACENE	J	4.1	9.3	PQL	ug/Kg	J (all detects)

LDC #: 25550B4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/6/11
SDG #: DE040 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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

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

	Validation Area		Comments
I.	Technical holding times	N	Sampling dates:
II.	ICP/MS Tune	—	
III.	Calibration	—	
IV.	Blanks	SW	ICB/CCB hits but no data qualified
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ca, Fe, Mg, Mn, Ti, Ba, Zn >4x)
VII.	Duplicate Sample Analysis	N	D.P (Hg, Sb, Mo <5x)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (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:

1	SL-132-SA5B-SS-0.0-0.5	11	SL-149-SA5B-SS-0.0-0.5	21	(#1) DUP	31	
2	SL-133-SA5B-SS-0.0-0.5	12	SL-156-SA5B-SS-0.0-0.5	22	(#2) MS	32	
3	SL-131-SA5B-SS-0.0-0.5	13	SL-150-SA5B-SS-0.0-0.5	23	↓ MSD	33	
4	SL-135-SA5B-SS-0.0-0.5	14	SL-181-SA5B-SS-0.0-0.5	24	↓ DUP	34	
5	SL-134-SA5B-SS-0.0-0.5	15	SL-136-SA5B-SS-0.0-0.5	25		35	
6	SED-021-SIV-SD-0.0-0.5	16	SL-203-SA5B-SS-0.0-0.5	26		36	
7	SED-018-SIV-SD-0.0-0.5	17	SL-257-SA5B-SS-0.0-0.5	27		37	
8	SED-016-SIV-SD-0.0-0.5	18	SL-204-SA5B-SS-0.0-0.5	28		38	
9	SL-153-SA5B-SS-0.0-0.5	19	(#1) MS	29		39	
10	SL-155-SA5B-SS-0.0-0.5	20	↓ MSD	30		40	

Notes: _____

LDC #: 25550B4

VALIDATION FINDINGS WORKSHEET

Sample Specific Element Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer:

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-18		[✓ Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr]
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
QC:19-21		[✓ 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]
22-24		Al, [✓ Sb, As, Ba, Be], B, [✓ Cd], Ca, [✓ Cr, Co, Cu], Fe, [✓ Pb], Li, Mg, [✓ Mo], Mn, Hg, [✓ Ni], P, K, [✓ Se, Ag], Na, Sr, [✓ Tl], Sn, Ti, [✓ V, Zn], Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

		Analysis Method
ICP		[✓ Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr]
ICP-MS		[✓ Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn]

Comments: [✓ Mercury by CVAA if performed]

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE040
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6166075BKG Serial Dilution Lab Sample ID: 6166075L
Batch ID(s): P35426A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Antimony	121	0.6686	B	1.5000	U	100		MS
Arsenic	75	13.3800		13.8350		3		MS
Barium	137	276.7000		328.7000		19	E	MS
Beryllium	9	1.6640		2.0970	B	26		MS
Cadmium	111	0.6644		0.9000	U	100		MS
Chromium	52	66.8100		78.7500		18	E	MS
Cobalt	59	17.8700		23.2700		30	E	MS
Copper	63	31.4400		40.6050		29		MS
Lead	208	47.4200		55.3000		17	E	MS
Molybdenum	98	1.9930		2.1420	B	7		MS
Nickel	60	55.1300		66.1000		20	E	MS
Selenium	78	0.5951	B	1.0000	U	100		MS
Silver	107	0.2900	B	0.3000	U	100		MS
Thallium	203	0.7003		0.7500	U	100		MS
Vanadium	51	142.9000		190.6000		33	E	MS
Zinc	66	434.8000		527.0000		21	E	MS

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

Lancaster Laboratories

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: DE040
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6166074BKG Serial Dilution Lab Sample ID: 6166074L
Batch ID(s): P35408A
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		127688.4100		122024.8000		4		P
Boron		63.5600		105.9000	B	67		P
Calcium		27935.3000		31169.2000		12	E	P
Iron		184659.3800		178491.0500		3		P
Lithium		141.8300		153.3500		8		P
Magnesium		33734.3800		37544.2000		11	E	P
Manganese		2004.3800		2068.7000		3		P
Phosphorus		3645.8900		3572.4500		2		P
Potassium		23040.9300		22485.4000		2		P
Sodium		1181.1500		1865.0000	U	100		P
Strontium		244.3500		237.4500		3		P
Tin		23.8100	B	50.0000	U	100		P
Titanium		10994.1300		11056.6500		1		P
Zirconium		21.5400	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

DE042

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-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3050B	6010B	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3050B	6020	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3060A	7199	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3550B	8081A	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3550B	8082	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3550B	8151A	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3550B	8270C	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	3550B	8270C SIM	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	Gen Prep	9045M	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	METHOD	300.0	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	METHOD	314.0	III
16-Dec-2010	SL-147-SA5B-SS-0.0-0.5	6167473	N	METHOD	7471A	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3050B	6010B	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3050B	6020	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3060A	7199	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3550B	8081A	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3550B	8082	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3550B	8151A	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3550B	8270C	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	3550B	8270C SIM	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	Gen Prep	9045M	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	METHOD	300.0	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	METHOD	314.0	III
16-Dec-2010	SL-178-SA5B-SS-0.0-0.5	6167478	N	METHOD	7471A	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3050B	6010B	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	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
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3060A	7199	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3550B	8081A	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3550B	8082	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3550B	8151A	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3550B	8270C	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	3550B	8270C SIM	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	Gen Prep	9045M	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	METHOD	300.0	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	METHOD	314.0	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5	6167477	N	METHOD	7471A	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5DUP	P167477D270821A	DUP	METHOD	300.0	III
16-Dec-2010	SL-176-SA5B-SS-0.0-0.5MS	P167477R270836A	MS	METHOD	300.0	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3050B	6010B	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3050B	6020	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3060A	7199	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3550B	8081A	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3550B	8082	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3550B	8151A	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3550B	8270C	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	3550B	8270C SIM	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	Gen Prep	9045M	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	METHOD	300.0	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	METHOD	314.0	III
16-Dec-2010	SED-019-SIV-SD-0.0-0.5	6167471	N	METHOD	7471A	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3050B	6010B	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	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
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3060A	7199	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3550B	8081A	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3550B	8082	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3550B	8151A	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3550B	8270C	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	3550B	8270C SIM	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	Gen Prep	9045M	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	METHOD	300.0	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	METHOD	314.0	III
16-Dec-2010	SED-017-SIV-SD-0.0-0.5	6167470	N	METHOD	7471A	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3050B	6010B	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3050B	6020	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3060A	7199	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3550B	8081A	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3550B	8082	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3550B	8151A	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3550B	8270C	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	3550B	8270C SIM	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	Gen Prep	9045M	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	METHOD	300.0	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	METHOD	314.0	III
16-Dec-2010	SL-186-SA5B-SS-0.0-0.5	6167479	N	METHOD	7471A	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3050B	6010B	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3050B	6020	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3060A	7199	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	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
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3550B	8082	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3550B	8151A	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3550B	8270C	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	3550B	8270C SIM	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	Gen Prep	9045M	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	METHOD	300.0	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	METHOD	314.0	III
16-Dec-2010	SL-198-SA5B-SS-0.0-0.5	6167488	N	METHOD	7471A	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3050B	6010B	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3050B	6020	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3060A	7199	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3550B	8081A	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3550B	8082	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3550B	8151A	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3550B	8270C	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	3550B	8270C SIM	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	Gen Prep	9045M	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	METHOD	300.0	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	METHOD	314.0	III
16-Dec-2010	SL-192-SA5B-SS-0.0-0.5	6167485	N	METHOD	7471A	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3050B	6010B	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3050B	6020	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3060A	7199	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3550B	8081A	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3550B	8082	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	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
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3550B	8270C	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	3550B	8270C SIM	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	Gen Prep	9045M	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	METHOD	300.0	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	METHOD	314.0	III
16-Dec-2010	SL-187-SA5B-SS-0.0-0.5	6167480	N	METHOD	7471A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3050B	6010B	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3050B	6020	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3060A	7199	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3550B	8081A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3550B	8082	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3550B	8151A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3550B	8270C	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	3550B	8270C SIM	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	Gen Prep	9045M	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	METHOD	300.0	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	METHOD	314.0	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5	6167481	N	METHOD	7471A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3050B	6010B	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3050B	6020	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3060A	7199	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3550B	8081A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3550B	8082	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3550B	8151A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	3550B	8270C	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	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
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	METHOD	300.0	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	METHOD	314.0	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MS	6167482	MS	METHOD	7471A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3050B	6010B	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3050B	6020	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3550B	8081A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3550B	8082	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3550B	8151A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3550B	8270C	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	3550B	8270C SIM	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5MSD	6167483	MSD	METHOD	7471A	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	3050B	6010B	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	3050B	6020	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	3060A	7199	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	Gen Prep	9045M	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	METHOD	300.0	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	METHOD	314.0	III
16-Dec-2010	SL-189-SA5B-SS-0.0-0.5DUP	6167484	DUP	METHOD	7471A	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3050B	6010B	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3050B	6020	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3060A	7199	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3550B	8081A	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3550B	8082	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3550B	8151A	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	3550B	8270C	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	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
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	Gen Prep	9045M	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	METHOD	300.0	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	METHOD	314.0	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	METHOD	6850	III
16-Dec-2010	SED-020-SIV-SD-0.0-0.5	6167472	N	METHOD	7471A	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3050B	6010B	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3050B	6020	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3060A	7199	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3550B	8081A	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3550B	8082	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3550B	8151A	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3550B	8270C	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	3550B	8270C SIM	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	Gen Prep	9045M	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	METHOD	300.0	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	METHOD	314.0	III
16-Dec-2010	SL-173-SA5B-SS-0.0-0.5	6167476	N	METHOD	7471A	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3050B	6010B	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3050B	6020	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3060A	7199	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3550B	8081A	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3550B	8082	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3550B	8151A	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3550B	8270C	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	3550B	8270C SIM	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	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
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	METHOD	300.0	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	METHOD	314.0	III
16-Dec-2010	SL-196-SA5B-SS-0.0-0.5	6167487	N	METHOD	7471A	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3050B	6010B	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3050B	6020	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3060A	7199	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3550B	8081A	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3550B	8082	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3550B	8151A	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3550B	8270C	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	3550B	8270C SIM	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	Gen Prep	9045M	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	METHOD	300.0	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	METHOD	314.0	III
16-Dec-2010	SL-199-SA5B-SS-0.0-0.5	6167489	N	METHOD	7471A	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3050B	6010B	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3050B	6020	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3060A	7199	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3550B	8081A	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3550B	8082	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3550B	8151A	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3550B	8270C	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	3550B	8270C SIM	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	Gen Prep	9045M	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	METHOD	300.0	III
16-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	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-Dec-2010	SL-169-SA5B-SS-0.0-0.5	6167474	N	METHOD	7471A	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3050B	6010B	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3050B	6020	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3060A	7199	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3550B	8081A	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3550B	8082	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3550B	8151A	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3550B	8270C	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	3550B	8270C SIM	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	Gen Prep	9045M	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	METHOD	300.0	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	METHOD	314.0	III
16-Dec-2010	SL-194-SA5B-SS-0.0-0.5	6167486	N	METHOD	7471A	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3050B	6010B	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3050B	6020	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3060A	7199	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3550B	8081A	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3550B	8082	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3550B	8151A	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3550B	8270C	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	3550B	8270C SIM	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	Gen Prep	9045M	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	METHOD	300.0	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	METHOD	314.0	III
16-Dec-2010	SL-172-SA5B-SS-0.0-0.5	6167475	N	METHOD	7471A	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	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
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3050B	6020	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3060A	7199	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3550B	8081A	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3550B	8082	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3550B	8151A	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3550B	8270C	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	3550B	8270C SIM	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	Gen Prep	9045M	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	METHOD	300.0	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	METHOD	314.0	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	METHOD	6850	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5	6167468	N	METHOD	7471A	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5DUP	P167468D272251A	DUP	METHOD	314.0	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5DUP	P167468D291400A	DUP	Gen Prep	9045M	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5MSD	P167468M241548A	MSD	METHOD	6850	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5MS	P167468R241542A	MS	METHOD	6850	III
16-Dec-2010	SED-011-SIV-SD-0.0-0.5MS	P167468R272314A	MS	METHOD	314.0	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3050B	6010B	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3050B	6020	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3060A	7199	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3550B	8081A	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3550B	8082	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3550B	8151A	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3550B	8270C	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	3550B	8270C SIM	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	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
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	METHOD	300.0	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	METHOD	314.0	III
16-Dec-2010	SL-202-SA5B-SS-0.0-0.5	6167490	N	METHOD	7471A	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3050B	6010B	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3050B	6020	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3060A	7199	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3550B	8081A	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3550B	8082	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3550B	8151A	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3550B	8270C	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	3550B	8270C SIM	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	Gen Prep	9045M	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	METHOD	300.0	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	METHOD	314.0	III
16-Dec-2010	SED-013-SIV-SD-0.0-0.5	6167469	N	METHOD	7471A	III

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

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORIDE	0.95	J	0.85	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-178-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORIDE	1.6		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	3.5		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-187-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORIDE	2.4		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORIDE	2.6		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-192-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORIDE	5.1		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-194-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:40:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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		0.84	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *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		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-199-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	2.8		0.85	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORIDE	2.5		0.86	MDL	1.1	PQL	mg/Kg	J	Q

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
LITHIUM	23.4		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	457		0.605	MDL	10.8	PQL	mg/Kg	J	Q
POTASSIUM	3370		19.5	MDL	54.0	PQL	mg/Kg	J	Q
SODIUM	75.3	J	40.3	MDL	108	PQL	mg/Kg	J	Z
TIN	2.50	J	1.08	MDL	10.8	PQL	mg/Kg	U	B

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.43	J	1.02	MDL	5.75	PQL	mg/Kg	J	Z
LITHIUM	32.2		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	449		0.644	MDL	11.5	PQL	mg/Kg	J	Q
POTASSIUM	4530		20.7	MDL	57.5	PQL	mg/Kg	J	Q
SODIUM	112	J	42.9	MDL	115	PQL	mg/Kg	J	Z
TIN	2.83	J	1.15	MDL	11.5	PQL	mg/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-017-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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
LITHIUM	22.2		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	475		0.620	MDL	11.1	PQL	mg/Kg	J	Q
POTASSIUM	3590		19.9	MDL	55.4	PQL	mg/Kg	J	Q
SODIUM	79.4	J	41.3	MDL	111	PQL	mg/Kg	J	Z
TIN	2.51	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	1.45	J	0.931	MDL	5.54	PQL	mg/Kg	J	Z

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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
BORON	6.31	J	1.15	MDL	6.48	PQL	mg/Kg	J	Z
LITHIUM	26.8		0.29	MDL	2.6	PQL	mg/Kg	J	A
PHOSPHORUS	707		0.726	MDL	13.0	PQL	mg/Kg	J	Q
POTASSIUM	3540		23.3	MDL	64.8	PQL	mg/Kg	J	Q
TIN	3.05	J	1.30	MDL	13.0	PQL	mg/Kg	U	B
Zirconium	1.15	J	1.09	MDL	6.48	PQL	mg/Kg	J	Z

Sample ID: SED-020-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 11:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.88	J	0.948	MDL	5.33	PQL	mg/Kg	J	Z
LITHIUM	22.5		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	310		0.597	MDL	10.7	PQL	mg/Kg	J	Q
POTASSIUM	2480		19.2	MDL	53.3	PQL	mg/Kg	J	Q
SODIUM	60.8	J	39.7	MDL	107	PQL	mg/Kg	J	Z
TIN	2.28	J	1.07	MDL	10.7	PQL	mg/Kg	U	B

Sample ID: SL-147-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
BORON	4.18	J	1.02	MDL	5.72	PQL	mg/Kg	J	Z
LITHIUM	21.8		0.25	MDL	2.3	PQL	mg/Kg	J	A
PHOSPHORUS	420		0.641	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	2620		20.6	MDL	57.2	PQL	mg/Kg	J	Q
TIN	2.28	J	1.14	MDL	11.4	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
Zirconium	1.47	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SL-169-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	22.7		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	444		0.616	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	3530		19.8	MDL	55.0	PQL	mg/Kg	J	Q
SODIUM	105	J	41.1	MDL	110	PQL	mg/Kg	J	Z
TIN	2.79	J	1.10	MDL	11.0	PQL	mg/Kg	U	B
Zirconium	1.96	J	0.925	MDL	5.50	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BORON	4.12	J	0.943	MDL	5.30	PQL	mg/Kg	J	Z
LITHIUM	18.7		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	309		0.593	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	3250		19.1	MDL	53.0	PQL	mg/Kg	J	Q
SODIUM	72.7	J	39.5	MDL	106	PQL	mg/Kg	J	Z
TIN	2.29	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.11	J	0.890	MDL	5.30	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.94	J	0.921	MDL	5.18	PQL	mg/Kg	J	Z
LITHIUM	18.9		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	290		0.580	MDL	10.4	PQL	mg/Kg	J	Q
POTASSIUM	3340		18.6	MDL	51.8	PQL	mg/Kg	J	Q
SODIUM	79.3	J	38.6	MDL	104	PQL	mg/Kg	J	Z
TIN	2.36	J	1.04	MDL	10.4	PQL	mg/Kg	U	B
Zirconium	1.53	J	0.869	MDL	5.18	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-176-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BORON	3.62	J	0.891	MDL	5.01	PQL	mg/Kg	J	Z
LITHIUM	13.7		0.22	MDL	2.0	PQL	mg/Kg	J	A
PHOSPHORUS	522		0.561	MDL	10.0	PQL	mg/Kg	J	Q
POTASSIUM	3470		18.0	MDL	50.1	PQL	mg/Kg	J	Q
TIN	2.12	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	1.27	J	0.841	MDL	5.01	PQL	mg/Kg	J	Z

Sample ID: SL-178-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BORON	5.32	J	1.11	MDL	6.23	PQL	mg/Kg	J	Z
LITHIUM	27.2		0.27	MDL	2.5	PQL	mg/Kg	J	A
PHOSPHORUS	500		0.698	MDL	12.5	PQL	mg/Kg	J	Q
POTASSIUM	3930		22.4	MDL	62.3	PQL	mg/Kg	J	Q
TIN	3.39	J	1.25	MDL	12.5	PQL	mg/Kg	U	B
Zirconium	1.36	J	1.05	MDL	6.23	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.32	J	0.937	MDL	5.27	PQL	mg/Kg	J	Z
LITHIUM	24.6		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	273		0.590	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	2940		19.0	MDL	52.7	PQL	mg/Kg	J	Q
SODIUM	104	J	39.3	MDL	105	PQL	mg/Kg	J	Z
TIN	2.43	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	1.98	J	0.885	MDL	5.27	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BORON	3.97	J	0.933	MDL	5.24	PQL	mg/Kg	J	Z
LITHIUM	18.3		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	279		0.587	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	2560		18.9	MDL	52.4	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
TIN	2.27	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.18	J	0.881	MDL	5.24	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
BORON	4.10	J	0.910	MDL	5.11	PQL	mg/Kg	J	Z
LITHIUM	16.5		0.23	MDL	2.0	PQL	mg/Kg	J	A
PHOSPHORUS	242		0.573	MDL	10.2	PQL	mg/Kg	J	Q
POTASSIUM	2860		18.4	MDL	51.1	PQL	mg/Kg	J	Q
SODIUM	91.0	J	38.2	MDL	102	PQL	mg/Kg	J	Z
TIN	2.31	J	1.02	MDL	10.2	PQL	mg/Kg	U	B
Zirconium	2.16	J	0.859	MDL	5.11	PQL	mg/Kg	J	Z

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
BORON	3.00	J	0.912	MDL	5.13	PQL	mg/Kg	J	Z
LITHIUM	18.4		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	316		0.574	MDL	10.3	PQL	mg/Kg	J	Q
POTASSIUM	2680		18.5	MDL	51.3	PQL	mg/Kg	J	Q
SODIUM	86.3	J	38.2	MDL	103	PQL	mg/Kg	J	Z
TIN	2.02	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.38	J	0.861	MDL	5.13	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.76	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
LITHIUM	19.6		0.24	MDL	2.2	PQL	mg/Kg	J	A
PHOSPHORUS	348		0.609	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3010		19.6	MDL	54.3	PQL	mg/Kg	J	Q
SODIUM	98.5	J	40.5	MDL	109	PQL	mg/Kg	J	Z
TIN	2.67	J	1.09	MDL	10.9	PQL	mg/Kg	U	B
Zirconium	1.63	J	0.913	MDL	5.43	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-196-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:12:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.62	J	0.893	MDL	5.02	PQL	mg/Kg	J	Z
LITHIUM	17.8		0.22	MDL	2.0	PQL	mg/Kg	J	A
PHOSPHORUS	325		0.562	MDL	10.0	PQL	mg/Kg	J	Q
POTASSIUM	3510		18.1	MDL	50.2	PQL	mg/Kg	J	Q
TIN	2.24	J	1.00	MDL	10.0	PQL	mg/Kg	U	B
Zirconium	2.34	J	0.843	MDL	5.02	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:59:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.82	J	0.914	MDL	5.14	PQL	mg/Kg	J	Z
LITHIUM	17.2		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	332		0.575	MDL	10.3	PQL	mg/Kg	J	Q
POTASSIUM	3150		18.5	MDL	51.4	PQL	mg/Kg	J	Q
SODIUM	96.2	J	38.3	MDL	103	PQL	mg/Kg	J	Z
TIN	2.30	J	1.03	MDL	10.3	PQL	mg/Kg	U	B
Zirconium	1.81	J	0.863	MDL	5.14	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	4.89	J	0.947	MDL	5.32	PQL	mg/Kg	J	Z
LITHIUM	19.2		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	300		0.596	MDL	10.6	PQL	mg/Kg	J	Q
POTASSIUM	3260		19.1	MDL	53.2	PQL	mg/Kg	J	Q
SODIUM	93.2	J	39.7	MDL	106	PQL	mg/Kg	J	Z
TIN	2.28	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.53	J	0.894	MDL	5.32	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
BORON	4.42	J	0.944	MDL	5.31	PQL	mg/Kg	J	Z
LITHIUM	21.9		0.23	MDL	2.1	PQL	mg/Kg	J	A
PHOSPHORUS	445		0.594	MDL	10.6	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
POTASSIUM	3960		19.1	MDL	53.1	PQL	mg/Kg	J	Q
SODIUM	93.3	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.61	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.47	J	0.891	MDL	5.31	PQL	mg/Kg	J	Z

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

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
SELENIUM	0.148	J	0.0441	MDL	0.441	PQL	mg/Kg	J	Z

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 2:18:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.641		0.0551	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
BARIUM	119		0.119	MDL	0.441	PQL	mg/Kg	J	E, A

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 2:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.189	J	0.0662	MDL	0.221	PQL	mg/Kg	UJ	Q, B
ARSENIC	6.56		0.0662	MDL	0.441	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.675		0.0176	MDL	0.110	PQL	mg/Kg	J	Q, E
CADMIUM	0.279		0.0397	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	20.1		0.132	MDL	0.441	PQL	mg/Kg	J	Q, E, A
COBALT	6.24		0.0221	MDL	0.110	PQL	mg/Kg	J	Q, A
COPPER	9.70		0.0728	MDL	0.441	PQL	mg/Kg	J	Q, E, A
LEAD	13.8		0.0115	MDL	0.221	PQL	mg/Kg	J	E, A
NICKEL	12.9		0.110	MDL	0.441	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

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 2:18:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SILVER	0.0437	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z, Q
THALLIUM	0.368		0.0331	MDL	0.110	PQL	mg/Kg	J	Q
VANADIUM	41.7		0.0243	MDL	0.110	PQL	mg/Kg	J	Q, E, A
ZINC	91.8		0.617	MDL	3.31	PQL	mg/Kg	J	E

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.207	J	0.0438	MDL	0.438	PQL	mg/Kg	J	Z

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.992		0.0547	MDL	0.109	PQL	mg/Kg	J	Q

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	180		0.118	MDL	0.438	PQL	mg/Kg	J	E, A

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.188	J	0.0657	MDL	0.219	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.74		0.0657	MDL	0.438	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.06		0.0175	MDL	0.109	PQL	mg/Kg	J	Q, E
CADMIUM	0.423		0.0394	MDL	0.109	PQL	mg/Kg	J	Q
CHROMIUM	37.4		0.131	MDL	0.438	PQL	mg/Kg	J	Q, E, A
COBALT	9.87		0.0219	MDL	0.109	PQL	mg/Kg	J	Q, A
COPPER	15.4		0.0722	MDL	0.438	PQL	mg/Kg	J	Q, E, A
LEAD	19.8		0.0114	MDL	0.219	PQL	mg/Kg	J	E, A
NICKEL	21.7		0.109	MDL	0.438	PQL	mg/Kg	J	Q, E, A
SILVER	0.0981	J	0.0131	MDL	0.109	PQL	mg/Kg	J	Z, Q
THALLIUM	0.575		0.0328	MDL	0.109	PQL	mg/Kg	J	Q
VANADIUM	69.0		0.0241	MDL	0.109	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

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-013-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 3:26:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	141		0.613	MDL	3.28	PQL	mg/Kg	J	E

Sample ID: SED-017-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 10:45:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.120	J	0.0443	MDL	0.443	PQL	mg/Kg	J	Z

Sample ID: SED-017-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 10:45:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.865		0.0554	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SED-017-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 10:45:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	136		0.120	MDL	0.443	PQL	mg/Kg	J	E, A

Sample ID: SED-017-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 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
ANTIMONY	0.210	J	0.0665	MDL	0.222	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.45		0.0665	MDL	0.443	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.735		0.0177	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.743		0.0399	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	30.3		0.133	MDL	0.443	PQL	mg/Kg	J	Q, E, A
COBALT	7.30		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	16.0		0.0731	MDL	0.443	PQL	mg/Kg	J	Q, E, A
LEAD	29.7		0.0115	MDL	0.222	PQL	mg/Kg	J	E, A
NICKEL	15.7		0.111	MDL	0.443	PQL	mg/Kg	J	Q, E, A
SILVER	0.141		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
THALLIUM	0.387		0.0332	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	52.1		0.0244	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	117		0.620	MDL	3.32	PQL	mg/Kg	J	E

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 9:30:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	308		1.83	MDL	9.81	PQL	mg/Kg	J	E

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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	0.202	J	0.0523	MDL	0.523	PQL	mg/Kg	J	Z

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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	3.69		0.0654	MDL	0.131	PQL	mg/Kg	J	Q

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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	183		0.141	MDL	0.523	PQL	mg/Kg	J	E, A

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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	0.931		0.0785	MDL	0.262	PQL	mg/Kg	J	Q
ARSENIC	11.1		0.0785	MDL	0.523	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.07		0.0209	MDL	0.131	PQL	mg/Kg	J	Q, E
CADMIUM	2.23		0.0471	MDL	0.131	PQL	mg/Kg	J	Q
CHROMIUM	40.2		0.157	MDL	0.523	PQL	mg/Kg	J	Q, E, A
COBALT	11.2		0.0262	MDL	0.131	PQL	mg/Kg	J	Q, A
COPPER	50.5		0.0864	MDL	0.523	PQL	mg/Kg	J	Q, E, A
LEAD	54.2		0.0136	MDL	0.262	PQL	mg/Kg	J	E, A
NICKEL	23.5		0.131	MDL	0.523	PQL	mg/Kg	J	Q, E, A
SILVER	0.267		0.0157	MDL	0.131	PQL	mg/Kg	J	Q
THALLIUM	0.505		0.0393	MDL	0.131	PQL	mg/Kg	J	Q
VANADIUM	68.2		0.0288	MDL	0.131	PQL	mg/Kg	J	Q, E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-020-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 11:40:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0829	J	0.0418	MDL	0.418	PQL	mg/Kg	J	Z

Sample ID: SED-020-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 11:40:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.497		0.0523	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SED-020-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 11:40:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	95.9		0.113	MDL	0.418	PQL	mg/Kg	J	E, A

Sample ID: SED-020-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 11:40:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.191	J	0.0627	MDL	0.209	PQL	mg/Kg	UJ	Q, B
ARSENIC	4.71		0.0627	MDL	0.418	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.548		0.0167	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.311		0.0376	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	19.0		0.125	MDL	0.418	PQL	mg/Kg	J	Q, E, A
COBALT	5.25		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	8.77		0.0690	MDL	0.418	PQL	mg/Kg	J	Q, E, A
LEAD	12.2		0.0109	MDL	0.209	PQL	mg/Kg	J	E, A
NICKEL	11.1		0.105	MDL	0.418	PQL	mg/Kg	J	Q, E, A
SILVER	0.0561	J	0.0125	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.284		0.0314	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	38.2		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, E, A
ZINC	96.5		0.585	MDL	3.14	PQL	mg/Kg	J	E

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 8:55:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	161		0.641	MDL	3.43	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: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 8:55:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.143	J	0.0458	MDL	0.458	PQL	mg/Kg	J	Z

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 8:55:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.78		0.0572	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 8:55:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	176		0.124	MDL	0.458	PQL	mg/Kg	J	E, A

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 8:55:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.319		0.0686	MDL	0.229	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.55		0.0686	MDL	0.458	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.926		0.0183	MDL	0.114	PQL	mg/Kg	J	Q, E
CADMIUM	0.806		0.0412	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	36.7		0.137	MDL	0.458	PQL	mg/Kg	J	Q, E, A
COBALT	10.9		0.0229	MDL	0.114	PQL	mg/Kg	J	Q, A
COPPER	20.3		0.0755	MDL	0.458	PQL	mg/Kg	J	Q, E, A
LEAD	40.9		0.0119	MDL	0.229	PQL	mg/Kg	J	E, A
NICKEL	23.9		0.114	MDL	0.458	PQL	mg/Kg	J	Q, E, A
SILVER	0.228		0.0137	MDL	0.114	PQL	mg/Kg	J	Q
THALLIUM	0.395		0.0343	MDL	0.114	PQL	mg/Kg	J	Q
VANADIUM	63.6		0.0252	MDL	0.114	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-169-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:37:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-169-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:37:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.12		0.0556	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-169-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:37:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	161		0.120	MDL	0.445	PQL	mg/Kg	J	E, A

Sample ID: SL-169-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:37:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.235		0.0667	MDL	0.222	PQL	mg/Kg	UJ	Q, B
ARSENIC	10.7		0.0667	MDL	0.445	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.922		0.0178	MDL	0.111	PQL	mg/Kg	J	Q, E
CADMIUM	0.562		0.0400	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	32.2		0.133	MDL	0.445	PQL	mg/Kg	J	Q, E, A
COBALT	8.98		0.0222	MDL	0.111	PQL	mg/Kg	J	Q, A
COPPER	16.4		0.0734	MDL	0.445	PQL	mg/Kg	J	Q, E, A
LEAD	21.2		0.0116	MDL	0.222	PQL	mg/Kg	J	E, A
NICKEL	19.9		0.111	MDL	0.445	PQL	mg/Kg	J	Q, E, A
SILVER	0.249		0.0133	MDL	0.111	PQL	mg/Kg	J	Q
THALLIUM	0.446		0.0333	MDL	0.111	PQL	mg/Kg	J	Q
VANADIUM	57.4		0.0245	MDL	0.111	PQL	mg/Kg	J	Q, E, A
ZINC	127		0.622	MDL	3.33	PQL	mg/Kg	J	E

Sample ID: SL-172-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:52:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.119	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-172-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:52:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.13		0.0530	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:52:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	158		0.114	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:52:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.213		0.0636	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	12.2		0.0636	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.925		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.326		0.0381	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	32.1		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E, A
COBALT	8.47		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, A
COPPER	13.8		0.0699	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	18.6		0.0110	MDL	0.212	PQL	mg/Kg	J	E, A
NICKEL	19.3		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E, A
SILVER	0.0762	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.442		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	55.2		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E, A
ZINC	84.3		0.593	MDL	3.18	PQL	mg/Kg	J	E

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.16		0.0513	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	155		0.111	MDL	0.410	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-173-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:12:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.216		0.0615	MDL	0.205	PQL	mg/Kg	UJ	Q, B
ARSENIC	11.2		0.0615	MDL	0.410	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.893		0.0164	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.345		0.0369	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	30.0		0.123	MDL	0.410	PQL	mg/Kg	J	Q, E, A
COBALT	8.40		0.0205	MDL	0.103	PQL	mg/Kg	J	Q, A
COPPER	13.6		0.0677	MDL	0.410	PQL	mg/Kg	J	Q, E, A
LEAD	16.3		0.0107	MDL	0.205	PQL	mg/Kg	J	E, A
NICKEL	18.7		0.103	MDL	0.410	PQL	mg/Kg	J	Q, E, A
SILVER	0.0930	J	0.0123	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.448		0.0308	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	53.7		0.0226	MDL	0.103	PQL	mg/Kg	J	Q, E, A
ZINC	99.2		0.574	MDL	3.08	PQL	mg/Kg	J	E

Sample ID: SL-176-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
SELENIUM	0.0667	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
MOLYBDENUM	0.811		0.0526	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-176-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 9:25:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	169		0.114	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: SL-176-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.192	J	0.0631	MDL	0.210	PQL	mg/Kg	UJ	Q, B
ARSENIC	4.93		0.0631	MDL	0.421	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.495		0.0168	MDL	0.105	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-176-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
CADMIUM	0.506		0.0379	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	20.5		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	7.07		0.0210	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	13.2		0.0694	MDL	0.421	PQL	mg/Kg	J	Q, E, A
LEAD	37.6		0.0109	MDL	0.210	PQL	mg/Kg	J	E, A
NICKEL	12.5		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E, A
SILVER	0.123		0.0126	MDL	0.105	PQL	mg/Kg	J	Q
THALLIUM	0.314		0.0315	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	53.2		0.0231	MDL	0.105	PQL	mg/Kg	J	Q, E, A
ZINC	110		0.589	MDL	3.15	PQL	mg/Kg	J	E

Sample ID: SL-178-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 9:15:00 ***Analysis Type:*** REA ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ZINC	474		1.78	MDL	9.53	PQL	mg/Kg	J	E

Sample ID: SL-178-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.183	J	0.0508	MDL	0.508	PQL	mg/Kg	J	Z

Sample ID: SL-178-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 9:15:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.46		0.0635	MDL	0.127	PQL	mg/Kg	J	Q

Sample ID: SL-178-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	202		0.137	MDL	0.508	PQL	mg/Kg	J	E, A

Sample ID: SL-178-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.533		0.0763	MDL	0.254	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-178-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
ARSENIC	8.88		0.0763	MDL	0.508	PQL	mg/Kg	J	Q, E
BERYLLIUM	1.03		0.0203	MDL	0.127	PQL	mg/Kg	J	Q, E
CADMIUM	2.39		0.0458	MDL	0.127	PQL	mg/Kg	J	Q
CHROMIUM	54.6		0.153	MDL	0.508	PQL	mg/Kg	J	Q, E, A
COBALT	13.1		0.0254	MDL	0.127	PQL	mg/Kg	J	Q, A
COPPER	32.0		0.0839	MDL	0.508	PQL	mg/Kg	J	Q, E, A
LEAD	101		0.0132	MDL	0.254	PQL	mg/Kg	J	E, A
NICKEL	35.0		0.127	MDL	0.508	PQL	mg/Kg	J	Q, E, A
SILVER	1.90		0.0153	MDL	0.127	PQL	mg/Kg	J	Q
THALLIUM	0.503		0.0381	MDL	0.127	PQL	mg/Kg	J	Q
VANADIUM	69.8		0.0280	MDL	0.127	PQL	mg/Kg	J	Q, E, A

Sample ID: SL-186-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:56:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.109	J	0.0409	MDL	0.409	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:56:00 ***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		0.0511	MDL	0.102	PQL	mg/Kg	J	Q

Sample ID: SL-186-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:56:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	177		0.110	MDL	0.409	PQL	mg/Kg	J	E, A

Sample ID: SL-186-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:56:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.222		0.0614	MDL	0.205	PQL	mg/Kg	UJ	Q, B
ARSENIC	16.4		0.0614	MDL	0.409	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.995		0.0164	MDL	0.102	PQL	mg/Kg	J	Q, E
CADMIUM	0.283		0.0368	MDL	0.102	PQL	mg/Kg	J	Q
CHROMIUM	34.6		0.123	MDL	0.409	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

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-186-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:56:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
COBALT	9.10		0.0205	MDL	0.102	PQL	mg/Kg	J	Q, A
COPPER	14.7		0.0675	MDL	0.409	PQL	mg/Kg	J	Q, E, A
LEAD	27.1		0.0106	MDL	0.205	PQL	mg/Kg	J	E, A
NICKEL	21.2		0.102	MDL	0.409	PQL	mg/Kg	J	Q, E, A
SILVER	0.119		0.0123	MDL	0.102	PQL	mg/Kg	J	Q
THALLIUM	0.426		0.0307	MDL	0.102	PQL	mg/Kg	J	Q
VANADIUM	58.8		0.0225	MDL	0.102	PQL	mg/Kg	J	Q, E, A
ZINC	96.3		0.573	MDL	3.07	PQL	mg/Kg	J	E

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 11:19:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.117	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 11:19:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.26		0.0530	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 11:19:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	148		0.114	MDL	0.424	PQL	mg/Kg	J	E, A

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.188	J	0.0636	MDL	0.212	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.93		0.0636	MDL	0.424	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.866		0.0169	MDL	0.106	PQL	mg/Kg	J	Q, E
CADMIUM	0.356		0.0381	MDL	0.106	PQL	mg/Kg	J	Q
CHROMIUM	32.7		0.127	MDL	0.424	PQL	mg/Kg	J	Q, E, A
COBALT	9.70		0.0212	MDL	0.106	PQL	mg/Kg	J	Q, A
COPPER	13.7		0.0699	MDL	0.424	PQL	mg/Kg	J	Q, E, A
LEAD	19.9		0.0110	MDL	0.212	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
NICKEL	22.2		0.106	MDL	0.424	PQL	mg/Kg	J	Q, E, A
SILVER	0.0889	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z, Q
THALLIUM	0.408		0.0318	MDL	0.106	PQL	mg/Kg	J	Q
VANADIUM	53.1		0.0233	MDL	0.106	PQL	mg/Kg	J	Q, E, A
ZINC	89.3		0.593	MDL	3.18	PQL	mg/Kg	J	E

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
CADMIUM	0.230		0.0387	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.143	J	0.0430	MDL	0.430	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.839		0.0537	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	119		0.116	MDL	0.430	PQL	mg/Kg	J	E, A

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.212	J	0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.46		0.0644	MDL	0.430	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.632		0.0172	MDL	0.107	PQL	mg/Kg	J	Q, E
CHROMIUM	20.4		0.129	MDL	0.430	PQL	mg/Kg	J	Q, E, A
COBALT	6.54		0.0215	MDL	0.107	PQL	mg/Kg	J	Q, A
COPPER	10.8		0.0709	MDL	0.430	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

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-189-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	13.8		0.0112	MDL	0.215	PQL	mg/Kg	J	E, A
NICKEL	13.8		0.107	MDL	0.430	PQL	mg/Kg	J	Q, E, A
SILVER	0.100	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z, Q
THALLIUM	0.358		0.0322	MDL	0.107	PQL	mg/Kg	J	Q
VANADIUM	38.0		0.0236	MDL	0.107	PQL	mg/Kg	J	Q, E, A
ZINC	57.3		0.602	MDL	3.22	PQL	mg/Kg	J	E

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 11:04:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.118	J	0.0410	MDL	0.410	PQL	mg/Kg	J	Z

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 11:04:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.936		0.0513	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 11:04:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	166		0.111	MDL	0.410	PQL	mg/Kg	J	E, A

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.247		0.0615	MDL	0.205	PQL	mg/Kg	UJ	Q, B
ARSENIC	15.1		0.0615	MDL	0.410	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.846		0.0164	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.507		0.0369	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	33.2		0.123	MDL	0.410	PQL	mg/Kg	J	Q, E, A
COBALT	8.86		0.0205	MDL	0.103	PQL	mg/Kg	J	Q, A
COPPER	17.3		0.0677	MDL	0.410	PQL	mg/Kg	J	Q, E, A
LEAD	16.4		0.0107	MDL	0.205	PQL	mg/Kg	J	E, A
NICKEL	21.8		0.103	MDL	0.410	PQL	mg/Kg	J	Q, E, A
SILVER	0.121		0.0123	MDL	0.103	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
THALLIUM	0.424		0.0308	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	56.9		0.0226	MDL	0.103	PQL	mg/Kg	J	Q, E, A
ZINC	129		0.574	MDL	3.08	PQL	mg/Kg	J	E

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** REA2 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.132	J	0.0431	MDL	0.431	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.752		0.0538	MDL	0.108	PQL	mg/Kg	J	Q

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	156		0.116	MDL	0.431	PQL	mg/Kg	J	E, A

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.209	J	0.0646	MDL	0.215	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.02		0.0646	MDL	0.431	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.881		0.0172	MDL	0.108	PQL	mg/Kg	J	Q, E
CADMIUM	0.261		0.0387	MDL	0.108	PQL	mg/Kg	J	Q
CHROMIUM	29.1		0.129	MDL	0.431	PQL	mg/Kg	J	Q, E, A
COBALT	8.37		0.0215	MDL	0.108	PQL	mg/Kg	J	Q, A
COPPER	12.5		0.0710	MDL	0.431	PQL	mg/Kg	J	Q, E, A
LEAD	14.2		0.0112	MDL	0.215	PQL	mg/Kg	J	E, A
NICKEL	17.2		0.108	MDL	0.431	PQL	mg/Kg	J	Q, E, A
SILVER	0.0775	J	0.0129	MDL	0.108	PQL	mg/Kg	J	Z, Q
THALLIUM	0.391		0.0323	MDL	0.108	PQL	mg/Kg	J	Q
VANADIUM	56.3		0.0237	MDL	0.108	PQL	mg/Kg	J	Q, E, A
ZINC	90.8		0.603	MDL	3.23	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	0.0401	MDL	0.401	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.35		0.0502	MDL	0.100	PQL	mg/Kg	J	Q

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	178		0.108	MDL	0.401	PQL	mg/Kg	J	E, A

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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		0.0602	MDL	0.201	PQL	mg/Kg	UJ	Q, B
ARSENIC	11.1		0.0602	MDL	0.401	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.974		0.0161	MDL	0.100	PQL	mg/Kg	J	Q, E
CADMIUM	0.407		0.0361	MDL	0.100	PQL	mg/Kg	J	Q
CHROMIUM	29.6		0.120	MDL	0.401	PQL	mg/Kg	J	Q, E, A
COBALT	11.8		0.0201	MDL	0.100	PQL	mg/Kg	J	Q, A
COPPER	14.4		0.0662	MDL	0.401	PQL	mg/Kg	J	Q, E, A
LEAD	16.6		0.0104	MDL	0.201	PQL	mg/Kg	J	E, A
NICKEL	19.0		0.100	MDL	0.401	PQL	mg/Kg	J	Q, E, A
SILVER	0.105		0.0120	MDL	0.100	PQL	mg/Kg	J	Q
THALLIUM	0.410		0.0301	MDL	0.100	PQL	mg/Kg	J	Q
VANADIUM	55.6		0.0221	MDL	0.100	PQL	mg/Kg	J	Q, E, A
ZINC	91.8		0.562	MDL	3.01	PQL	mg/Kg	J	E

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.126	J	0.0419	MDL	0.419	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-198-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:59:00 ***Analysis Type:*** REA3 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	2.73		0.0524	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-198-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:59:00 ***Analysis Type:*** REA4 ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	158		0.113	MDL	0.419	PQL	mg/Kg	J	E, A

Sample ID: SL-198-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:59:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.530		0.0628	MDL	0.209	PQL	mg/Kg	J	Q
ARSENIC	12.8		0.0628	MDL	0.419	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.799		0.0168	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	1.33		0.0377	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	38.6		0.126	MDL	0.419	PQL	mg/Kg	J	Q, E, A
COBALT	33.3		0.0209	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	102		0.0691	MDL	0.419	PQL	mg/Kg	J	Q, E, A
LEAD	59.0		0.0109	MDL	0.209	PQL	mg/Kg	J	E, A
NICKEL	36.3		0.105	MDL	0.419	PQL	mg/Kg	J	Q, E, A
SILVER	0.146		0.0126	MDL	0.105	PQL	mg/Kg	J	Q
THALLIUM	0.422		0.0314	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	55.3		0.0230	MDL	0.105	PQL	mg/Kg	J	Q, E, A
ZINC	188		0.587	MDL	3.14	PQL	mg/Kg	J	E

Sample ID: SL-199-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	0.204	J	0.0421	MDL	0.421	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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	1.15		0.0527	MDL	0.105	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-199-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 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	142		0.114	MDL	0.421	PQL	mg/Kg	J	E, A

Sample ID: SL-199-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 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	0.157	J	0.0632	MDL	0.211	PQL	mg/Kg	UJ	Q, B
ARSENIC	9.33		0.0632	MDL	0.421	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.742		0.0169	MDL	0.105	PQL	mg/Kg	J	Q, E
CADMIUM	0.517		0.0379	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	29.9		0.126	MDL	0.421	PQL	mg/Kg	J	Q, E, A
COBALT	10.0		0.0211	MDL	0.105	PQL	mg/Kg	J	Q, A
COPPER	25.4		0.0695	MDL	0.421	PQL	mg/Kg	J	Q, E, A
LEAD	22.0		0.0110	MDL	0.211	PQL	mg/Kg	J	E, A
NICKEL	23.3		0.105	MDL	0.421	PQL	mg/Kg	J	Q, E, A
SILVER	0.0725	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z, Q
THALLIUM	0.424		0.0316	MDL	0.105	PQL	mg/Kg	J	Q
VANADIUM	50.1		0.0232	MDL	0.105	PQL	mg/Kg	J	Q, E, A
ZINC	82.9		0.590	MDL	3.16	PQL	mg/Kg	J	E

Sample ID: SL-202-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 2:23:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0909	J	0.0412	MDL	0.412	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 2:23:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.05		0.0515	MDL	0.103	PQL	mg/Kg	J	Q

Sample ID: SL-202-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 2:23:00 **Analysis Type:** REA4 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	154		0.111	MDL	0.412	PQL	mg/Kg	J	E, A

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.189	J	0.0618	MDL	0.206	PQL	mg/Kg	UJ	Q, B
ARSENIC	7.14		0.0618	MDL	0.412	PQL	mg/Kg	J	Q, E
BERYLLIUM	0.775		0.0165	MDL	0.103	PQL	mg/Kg	J	Q, E
CADMIUM	0.334		0.0371	MDL	0.103	PQL	mg/Kg	J	Q
CHROMIUM	28.3		0.124	MDL	0.412	PQL	mg/Kg	J	Q, E, A
COBALT	7.91		0.0206	MDL	0.103	PQL	mg/Kg	J	Q, A
COPPER	13.2		0.0680	MDL	0.412	PQL	mg/Kg	J	Q, E, A
LEAD	17.3		0.0107	MDL	0.206	PQL	mg/Kg	J	E, A
NICKEL	18.1		0.103	MDL	0.412	PQL	mg/Kg	J	Q, E, A
SILVER	0.0856	J	0.0124	MDL	0.103	PQL	mg/Kg	J	Z, Q
THALLIUM	0.405		0.0309	MDL	0.103	PQL	mg/Kg	J	Q
VANADIUM	53.0		0.0227	MDL	0.103	PQL	mg/Kg	J	Q, E, A
ZINC	98.7		0.577	MDL	3.09	PQL	mg/Kg	J	E

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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	0.60	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.95	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SED-017-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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	0.56	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-172-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 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
HEXAVALENT CHROMIUM	0.32	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-173-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:12:00 **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-176-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 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	0.90	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 10:56:00 **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	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 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	0.69	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-189-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 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
HEXAVALENT CHROMIUM	0.58	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:40:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.36	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:12:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.72	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.70	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.76	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.86	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0198	J	0.0031	MDL	0.109	PQL	mg/Kg	J	Z

Sample ID: SED-017-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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	0.0741	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SED-020-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0051	J	0.0030	MDL	0.105	PQL	mg/Kg	J	Z

Sample ID: SL-169-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:37:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0119	J	0.0032	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: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	0.0028	MDL	0.0986	PQL	mg/Kg	J	Z

Sample ID: SL-176-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.0109	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0212	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Sample ID: SL-187-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.0130	J	0.0030	MDL	0.104	PQL	mg/Kg	J	Z

Sample ID: SL-194-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.101	J	0.0029	MDL	0.103	PQL	mg/Kg	J	Z

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0267	J	0.0028	MDL	0.0989	PQL	mg/Kg	J	Z

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0108	J	0.0028	MDL	0.0992	PQL	mg/Kg	J	Z

Sample ID: SL-199-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.0067	J	0.0029	MDL	0.100	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7471A **Matrix:** SO

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	0.0503	J	0.0029	MDL	0.102	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
ALPHA-BHC	1.2		0.037	MDL	0.18	PQL	ug/Kg	J	S
DELTA-BHC	0.27		0.040	MDL	0.18	PQL	ug/Kg	J	S
ENDOSULFAN I	0.13	J	0.049	MDL	0.18	PQL	ug/Kg	J	Z, S

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.071	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z, S

Sample ID: SED-017-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
4,4'-DDE	1.3	U	1.3	MDL	1.3	PQL	ug/Kg	UJ	S
4,4'-DDT	2.1	U	2.1	MDL	2.1	PQL	ug/Kg	UJ	S
ALDRIN	0.075	U	0.075	MDL	0.19	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
BETA-BHC	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
Chlordane	2.1	U	2.1	MDL	3.8	PQL	ug/Kg	UJ	S
DELTA-BHC	0.041	U	0.041	MDL	0.19	PQL	ug/Kg	UJ	S
DIELDRIN	0.34	U	0.34	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.050	U	0.050	MDL	0.19	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.15	U	0.15	MDL	0.38	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN	0.075	U	0.075	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.28	U	0.28	MDL	0.38	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.22	U	0.22	MDL	0.38	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-017-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.068	U	0.068	MDL	0.19	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.055	U	0.055	MDL	0.19	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.9	PQL	ug/Kg	UJ	S
MIREX	0.55	U	0.55	MDL	0.55	PQL	ug/Kg	UJ	S
TOXAPHENE	2.5	U	2.5	MDL	7.5	PQL	ug/Kg	UJ	S

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 9:30:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.29	J	0.24	MDL	1.1	PQL	ug/Kg	J	Z

Sample ID: SED-020-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 11:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.075	J	0.039	MDL	0.18	PQL	ug/Kg	J	Z, S

Sample ID: SL-169-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:37:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.057	J	0.039	MDL	0.19	PQL	ug/Kg	J	Z
DELTA-BHC	0.056	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:52:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ALPHA-BHC	0.090	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z
DELTA-BHC	0.15	J	0.038	MDL	0.18	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.036	J	0.036	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
HEPTACHLOR	0.46	J	0.32	MDL	0.87	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-186-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:56:00 ***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	0.080	J	0.064	MDL	0.18	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
4,4'-DDD	0.37		0.26	MDL	0.36	PQL	ug/Kg	J	S
4,4'-DDE	0.43	U	0.43	MDL	0.43	PQL	ug/Kg	R	S
4,4'-DDT	0.54	U	0.54	MDL	0.54	PQL	ug/Kg	R	S
ALDRIN	0.070	U	0.070	MDL	0.18	PQL	ug/Kg	R	S
ALPHA-BHC	0.036	U	0.036	MDL	0.18	PQL	ug/Kg	R	S
BETA-BHC	0.095	U	0.095	MDL	0.18	PQL	ug/Kg	R	S
Chlordane	3.4	U	3.4	MDL	3.6	PQL	ug/Kg	R	S
DELTA-BHC	0.43		0.038	MDL	0.18	PQL	ug/Kg	J	S
DIELDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDOSULFAN I	0.047	U	0.047	MDL	0.18	PQL	ug/Kg	R	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.32	U	0.32	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN KETONE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.066	U	0.066	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR	0.064	U	0.064	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.074	U	0.074	MDL	0.18	PQL	ug/Kg	R	S
METHOXYCHLOR	0.36	U	0.36	MDL	1.8	PQL	ug/Kg	R	S
MIREX	0.34	U	0.34	MDL	0.36	PQL	ug/Kg	R	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	R	S

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***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	0.23	U	0.23	MDL	0.38	PQL	ug/Kg	R	S
4,4'-DDE	0.29	U	0.29	MDL	0.38	PQL	ug/Kg	R	S
4,4'-DDT	0.51	U	0.51	MDL	0.51	PQL	ug/Kg	R	S
ALDRIN	0.073	U	0.073	MDL	0.18	PQL	ug/Kg	R	S
ALPHA-BHC	0.14	J	0.038	MDL	0.18	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.067	U	0.067	MDL	0.18	PQL	ug/Kg	R	S
Chlordane	5.0	U	5.0	MDL	5.0	PQL	ug/Kg	R	S
DELTA-BHC	0.040	U	0.040	MDL	0.18	PQL	ug/Kg	R	S
DIELDRIN	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	R	S
ENDOSULFAN I	0.049	U	0.049	MDL	0.18	PQL	ug/Kg	R	S
ENDOSULFAN II	0.080	U	0.080	MDL	0.38	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN	0.073	U	0.073	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.23	U	0.23	MDL	0.38	PQL	ug/Kg	R	S
ENDRIN KETONE	0.13	U	0.13	MDL	0.38	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.038	U	0.038	MDL	0.18	PQL	ug/Kg	R	S
HEPTACHLOR	0.44	U	0.44	MDL	0.44	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.065	U	0.065	MDL	0.18	PQL	ug/Kg	R	S
METHOXYCHLOR	0.38	U	0.38	MDL	1.8	PQL	ug/Kg	R	S
MIREX	0.13	U	0.13	MDL	0.38	PQL	ug/Kg	R	S
TOXAPHENE	2.4	U	2.4	MDL	7.3	PQL	ug/Kg	R	S

Sample ID: SL-196-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:12:00 ***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	0.13	U	0.13	MDL	0.36	PQL	ug/Kg	R	S
4,4'-DDE	0.43	U	0.43	MDL	0.43	PQL	ug/Kg	R	S
4,4'-DDT	0.48	U	0.48	MDL	0.48	PQL	ug/Kg	R	S
ALDRIN	0.084	J	0.070	MDL	0.17	PQL	ug/Kg	J	Z, S
ALPHA-BHC	0.043	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z, S
BETA-BHC	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	R	S
Chlordane	0.84	U	0.84	MDL	3.6	PQL	ug/Kg	R	S
DELTA-BHC	0.12	U	0.12	MDL	0.17	PQL	ug/Kg	R	S
DIELDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDOSULFAN I	0.081	U	0.081	MDL	0.17	PQL	ug/Kg	R	S
ENDOSULFAN II	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.070	U	0.070	MDL	0.36	PQL	ug/Kg	R	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	0.37	U	0.37	MDL	0.37	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.048	J	0.036	MDL	0.17	PQL	ug/Kg	J	Z, S
HEPTACHLOR	0.063	U	0.063	MDL	0.17	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.40	U	0.40	MDL	0.40	PQL	ug/Kg	R	S
METHOXYCHLOR	0.67	U	0.67	MDL	1.7	PQL	ug/Kg	R	S
MIREX	0.87	U	0.87	MDL	0.87	PQL	ug/Kg	R	S
TOXAPHENE	2.3	U	2.3	MDL	7.0	PQL	ug/Kg	R	S

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BETA-BHC	0.14	J	0.064	MDL	0.18	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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 1260	1.1	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	2.6	J	1.1	MDL	3.6	PQL	ug/Kg	J	Z, L

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
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	4.7		1.1	MDL	3.8	PQL	ug/Kg	J	L

Sample ID: SED-017-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
Aroclor 5432	2.3	U	2.3	MDL	7.5	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-017-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 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
Aroclor 5442	2.3	U	2.3	MDL	7.5	PQL	ug/Kg	UJ	L
Aroclor 5460	13		2.3	MDL	7.5	PQL	ug/Kg	J	L

Sample ID: SED-019-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 9:30:00 ***Analysis Type:*** RES ***Dilution:*** 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	13	U	13	MDL	44	PQL	ug/Kg	UJ	L
Aroclor 5442	13	U	13	MDL	44	PQL	ug/Kg	UJ	L
Aroclor 5460	130		13	MDL	44	PQL	ug/Kg	J	L

Sample ID: SED-020-SIV-SD-0.0-0.5 ***Collected:*** 12/16/2010 11:40:00 ***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	2.5	J	0.72	MDL	3.7	PQL	ug/Kg	J	Z
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	6.6	J	2.2	MDL	7.2	PQL	ug/Kg	J	Z, L

Sample ID: SL-147-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 8:55:00 ***Analysis Type:*** RES ***Dilution:*** 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	5.7	U	5.7	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5442	5.7	U	5.7	MDL	19	PQL	ug/Kg	UJ	L
Aroclor 5460	62		5.7	MDL	19	PQL	ug/Kg	J	L

Sample ID: SL-169-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:37:00 ***Analysis Type:*** RES ***Dilution:*** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.3	U	2.3	MDL	7.5	PQL	ug/Kg	UJ	L
Aroclor 5442	2.3	U	2.3	MDL	7.5	PQL	ug/Kg	UJ	L
Aroclor 5460	7.0	J	2.3	MDL	7.5	PQL	ug/Kg	J	Z, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:52:00 *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	0.92	J	0.35	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	2.1	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	3.8		1.1	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-176-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 9:25:00 *Analysis Type:* RES *Dilution:* 250

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	260	U	260	MDL	870	PQL	ug/Kg	UJ	L
Aroclor 5442	260	U	260	MDL	870	PQL	ug/Kg	UJ	L
Aroclor 5460	260	U	260	MDL	870	PQL	ug/Kg	UJ	L

Sample ID: SL-178-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 9:15:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	13	U	13	MDL	42	PQL	ug/Kg	UJ	L
Aroclor 5442	13	U	13	MDL	42	PQL	ug/Kg	UJ	L
Aroclor 5460	54		13	MDL	42	PQL	ug/Kg	J	L

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *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	3.0	J	0.71	MDL	3.7	PQL	ug/Kg	J	Z
AROCLOR 1260	1.1	J	0.71	MDL	3.7	PQL	ug/Kg	J	Z
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	5.0	J	2.1	MDL	7.1	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SL-187-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
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	5.6		1.1	MDL	3.5	PQL	ug/Kg	J	L

Sample ID: SL-189-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
AROCLOR 1254	1.3	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
AROCLOR 1260	0.86	J	0.35	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	2.7	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SL-192-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	3.3	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
AROCLOR 1260	5.5	J	1.8	MDL	9.1	PQL	ug/Kg	J	Z
Aroclor 5432	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5442	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L
Aroclor 5460	5.4	U	5.4	MDL	18	PQL	ug/Kg	UJ	L

Sample ID: SL-194-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
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	3.0	J	1.1	MDL	3.7	PQL	ug/Kg	J	Z, L

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	6.1		1.1	MDL	3.5	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: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	3.2	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Sample ID: SL-199-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:23:00 *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	7.8		0.70	MDL	3.6	PQL	ug/Kg	J	S
AROCLOR 1260	13		0.70	MDL	3.6	PQL	ug/Kg	J	S
Aroclor 5432	2.1	U	2.1	MDL	7.0	PQL	ug/Kg	UJ	L
Aroclor 5442	2.1	U	2.1	MDL	7.0	PQL	ug/Kg	UJ	L
Aroclor 5460	9.9		2.1	MDL	7.0	PQL	ug/Kg	J	S, L

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	3.5	PQL	ug/Kg	UJ	L
Aroclor 5442	1.1	U	1.1	MDL	3.5	PQL	ug/Kg	UJ	L
Aroclor 5460	2.2	J	1.1	MDL	3.5	PQL	ug/Kg	J	Z, L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
2,4-D	1.9	J	1.3	MDL	4.0	PQL	ug/Kg	J	Z
DICAMBA	0.59	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.88	U	0.88	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.78	J	0.46	MDL	1.4	PQL	ug/Kg	J	Z
DINOSEB	0.92	U	0.92	MDL	2.8	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SED-017-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
2,4-D	1.9	J	1.4	MDL	4.1	PQL	ug/Kg	J	Z
DICAMBA	0.49	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
MCPP	220	J	85	MDL	280	PQL	ug/Kg	J	Z

Sample ID: SED-019-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
DICAMBA	0.73	J	0.54	MDL	1.6	PQL	ug/Kg	J	Z
DINOSEB	1.1	U	1.1	MDL	3.2	PQL	ug/Kg	R	L

Sample ID: SED-020-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 11:40:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.57	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

Sample ID: SL-147-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 8:55:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.92	U	0.92	MDL	2.7	PQL	ug/Kg	R	L
MCPA	260	J	87	MDL	290	PQL	ug/Kg	J	Z

Sample ID: SL-169-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-176-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
DICHLOROPROP	1.4	J	0.84	MDL	1.8	PQL	ug/Kg	J	Z
DINOSEB	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-178-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
DICAMBA	0.55	J	0.51	MDL	1.5	PQL	ug/Kg	J	Z
DINOSEB	1.0	U	1.0	MDL	3.1	PQL	ug/Kg	R	L

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *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	2.7	U	2.7	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-187-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
DICAMBA	0.52	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-189-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
DALAPON	4.7	U	4.7	MDL	9.7	PQL	ug/Kg	R	Q
DICAMBA	0.49	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z, Q, Q
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L
MCPP	610	U	610	MDL	610	PQL	ug/Kg	R	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8151A **Matrix:** SO

Sample ID: SL-192-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
DICAMBA	0.84	J	0.43	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	1.8	U	1.8	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-194-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:40:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DICAMBA	0.46	J	0.44	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.89	U	0.89	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SL-196-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 1:12:00 ***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	0.84	U	0.84	MDL	2.5	PQL	ug/Kg	R	L

Sample ID: SL-198-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 10:59:00 ***Analysis Type:*** RES-BASE/NEUTRAL ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L

Sample ID: SL-199-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
DINOSEB	0.85	U	0.85	MDL	2.6	PQL	ug/Kg	R	L
MCPP	220	J	80	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SL-202-SA5B-SS-0.0-0.5 ***Collected:*** 12/16/2010 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
DINOSEB	0.86	U	0.86	MDL	2.6	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SED-011-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	95	J	18	MDL	370	PQL	ug/Kg	J	Z

Sample ID: SED-013-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 3:26:00 **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	28	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SED-017-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	51	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SED-019-SIV-SD-0.0-0.5 **Collected:** 12/16/2010 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
BENZO(A)ANTHRACENE	24	J	22	MDL	220	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	120	J	22	MDL	450	PQL	ug/Kg	J	Z
Butylbenzylphthalate	42	J	22	MDL	220	PQL	ug/Kg	J	Z
CHRYSENE	37	J	22	MDL	220	PQL	ug/Kg	J	Z
Di-n-butylphthalate	26	J	22	MDL	220	PQL	ug/Kg	J	Z
FLUORANTHENE	71	J	22	MDL	220	PQL	ug/Kg	J	Z
PYRENE	47	J	22	MDL	220	PQL	ug/Kg	J	Z

Sample ID: SL-147-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 8:55:00 **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	44	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SL-169-SA5B-SS-0.0-0.5 **Collected:** 12/16/2010 1:37:00 **Analysis Type:** RES-BASE/NEUTRAL **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(G,H,I)PERYLENE	72	J	19	MDL	190	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	19	MDL	380	PQL	ug/Kg	J	Z
FLUORANTHENE	21	J	19	MDL	190	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	82	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	49	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-178-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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	43	J	21	MDL	430	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *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	45	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-187-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	81	J	18	MDL	350	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 11:25:00 *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-DIMETHYLPHENOL	36	U	36	MDL	180	PQL	ug/Kg	UJ	Q
ANILINE	180	U	180	MDL	540	PQL	ug/Kg	UJ	Q
BENZIDINE	1300	U	1300	MDL	3600	PQL	ug/Kg	R	Q

Sample ID: SL-192-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 11:04:00 *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	47	J	18	MDL	360	PQL	ug/Kg	J	Z

Sample ID: SL-194-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:40:00 *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	20	J	18	MDL	370	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
FLUORANTHENE	59	J	18	MDL	180	PQL	ug/Kg	J	Z
PYRENE	57	J	18	MDL	180	PQL	ug/Kg	J	Z

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

Sample ID: SED-011-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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	0.40	J	0.37	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	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	1.1	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
Di-n-octylphthalate	8.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SED-013-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 3:26:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BENZO(A)ANTHRACENE	1.7	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	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
INDENO(1,2,3-CD)PYRENE	1.2	J	0.77	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SED-017-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 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
CHRYSENE	1.8	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SED-019-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	6.0	J	2.2	MDL	11	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	9.7	J	4.5	MDL	11	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: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SED-019-SIV-SD-0.0-0.5 *Collected:* 12/16/2010 9:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
INDENO(1,2,3-CD)PYRENE	8.6	J	4.5	MDL	11	PQL	ug/Kg	J	Z
NAPHTHALENE	9.0	J	4.5	MDL	11	PQL	ug/Kg	J	Z

Sample ID: SL-169-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.90	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SL-172-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.86	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.5	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.82	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.94	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-173-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *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	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.94	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	1.4	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.6	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
FLUORENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-176-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
1-METHYLNAPHTHALENE	0.95	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.0	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	1.4	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-178-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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-METHYLNAPHTHALENE	0.86	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.3	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
ANTHRACENE	0.87	J	0.43	MDL	2.1	PQL	ug/Kg	J	Z
Butylbenzylphthalate	8.8	J	7.7	MDL	23	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.2	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.2	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SL-186-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:56:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.3	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.94	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.6	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-189-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BENZO(B)FLUORANTHENE	0.85	J	0.72	MDL	1.8	PQL	ug/Kg	J	Z
CHRYSENE	0.96	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
Diethylphthalate	6.4	U	6.4	MDL	19	PQL	ug/Kg	UJ	Q

Sample ID: SL-192-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 11:04:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.44	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
DIBENZO(A,H)ANTHRACENE	0.80	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

Sample ID: SL-194-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:40:00 *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	0.45	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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-194-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:40:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DIBENZO(A,H)ANTHRACENE	1.5	J	0.74	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-196-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 1:12:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.96	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	1.1	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
ANTHRACENE	0.41	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.3	J	6.3	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.93	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z
NAPHTHALENE	0.96	J	0.70	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SL-198-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 10:59:00 *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	3.9	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	8.6	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	7.6	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
FLUORANTHENE	4.5	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
PHENANTHRENE	4.7	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
PYRENE	4.4	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

Sample ID: SL-199-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 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
BENZO(A)ANTHRACENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.4	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	8.5	J	6.4	MDL	19	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.94	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
PHENANTHRENE	1.2	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
PYRENE	1.7	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: PrepDE042_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SL-202-SA5B-SS-0.0-0.5 *Collected:* 12/16/2010 2:23:00 *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	6.4	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	6.0	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	4.4	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z
CHRYSENE	8.6	J	1.8	MDL	8.9	PQL	ug/Kg	J	Z
PHENANTHRENE	4.8	J	3.6	MDL	8.9	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_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: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_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: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_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

DE042

Method Blank Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory:** LL

EDD Filename: DE042_v1 **eQAPP Name:** CDM_SSFL_110509

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35408BB221619	12/30/2010 4:19:00 PM	CALCIUM	5.92 mg/Kg	SED-011-SIV-SD-0.0-0.5
		PHOSPHORUS	1.80 mg/Kg	SED-013-SIV-SD-0.0-0.5
		TIN	1.23 mg/Kg	SED-017-SIV-SD-0.0-0.5
				SED-019-SIV-SD-0.0-0.5
				SED-020-SIV-SD-0.0-0.5
				SL-147-SA5B-SS-0.0-0.5
				SL-169-SA5B-SS-0.0-0.5
				SL-172-SA5B-SS-0.0-0.5
				SL-173-SA5B-SS-0.0-0.5
				SL-176-SA5B-SS-0.0-0.5
				SL-178-SA5B-SS-0.0-0.5
				SL-186-SA5B-SS-0.0-0.5
				SL-187-SA5B-SS-0.0-0.5
				SL-189-SA5B-SS-0.0-0.5
				SL-192-SA5B-SS-0.0-0.5
				SL-194-SA5B-SS-0.0-0.5
				SL-196-SA5B-SS-0.0-0.5
				SL-198-SA5B-SS-0.0-0.5
				SL-199-SA5B-SS-0.0-0.5
				SL-202-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-011-SIV-SD-0.0-0.5(RES)	TIN	2.50 mg/Kg	2.50U mg/Kg
SED-013-SIV-SD-0.0-0.5(RES)	TIN	2.83 mg/Kg	2.83U mg/Kg
SED-017-SIV-SD-0.0-0.5(RES)	TIN	2.51 mg/Kg	2.51U mg/Kg
SED-019-SIV-SD-0.0-0.5(RES)	TIN	3.05 mg/Kg	3.05U mg/Kg
SED-020-SIV-SD-0.0-0.5(RES)	TIN	2.28 mg/Kg	2.28U mg/Kg
SL-147-SA5B-SS-0.0-0.5(RES)	TIN	2.28 mg/Kg	2.28U mg/Kg
SL-169-SA5B-SS-0.0-0.5(RES)	TIN	2.79 mg/Kg	2.79U mg/Kg
SL-172-SA5B-SS-0.0-0.5(RES)	TIN	2.29 mg/Kg	2.29U mg/Kg
SL-173-SA5B-SS-0.0-0.5(RES)	TIN	2.36 mg/Kg	2.36U mg/Kg
SL-176-SA5B-SS-0.0-0.5(RES)	TIN	2.12 mg/Kg	2.12U mg/Kg
SL-178-SA5B-SS-0.0-0.5(RES)	TIN	3.39 mg/Kg	3.39U mg/Kg
SL-186-SA5B-SS-0.0-0.5(RES)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-187-SA5B-SS-0.0-0.5(RES)	TIN	2.27 mg/Kg	2.27U mg/Kg
SL-189-SA5B-SS-0.0-0.5(RES)	TIN	2.31 mg/Kg	2.31U mg/Kg
SL-192-SA5B-SS-0.0-0.5(RES)	TIN	2.02 mg/Kg	2.02U mg/Kg
SL-194-SA5B-SS-0.0-0.5(RES)	TIN	2.67 mg/Kg	2.67U mg/Kg
SL-196-SA5B-SS-0.0-0.5(RES)	TIN	2.24 mg/Kg	2.24U mg/Kg
SL-198-SA5B-SS-0.0-0.5(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg
SL-199-SA5B-SS-0.0-0.5(RES)	TIN	2.28 mg/Kg	2.28U mg/Kg
SL-202-SA5B-SS-0.0-0.5(RES)	TIN	2.61 mg/Kg	2.61U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

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

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35426BB221518A	12/30/2010 3:18:00 PM	COPPER	0.111 mg/Kg	SED-011-SIV-SD-0.0-0.5 SED-013-SIV-SD-0.0-0.5 SED-017-SIV-SD-0.0-0.5 SED-019-SIV-SD-0.0-0.5 SED-020-SIV-SD-0.0-0.5 SL-147-SA5B-SS-0.0-0.5 SL-169-SA5B-SS-0.0-0.5 SL-172-SA5B-SS-0.0-0.5 SL-173-SA5B-SS-0.0-0.5 SL-176-SA5B-SS-0.0-0.5 SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_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-189-SA5B-SS-0.0-0.5MS (SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5)	FLUORIDE	77	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	4,4'-DDE ALPHA-BHC	- -	166 -	18.00-161.00 10.00-129.00	- 53 (50.00)	4,4'-DDE ALPHA-BHC	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	2,4-DB DICAMBA DINOSEB	- - -	273 148 -	20.00-170.00 33.00-120.00 1.00-44.00	87 (50.00) 52 (50.00) 85 (35.00)	2,4-DB DICAMBA DINOSEB	J(all detects)
SL-189-SA5B-SS-0.0-0.5MS SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	DALAPON MCPP	0 0	- -	12.00-86.00 16.00-174.00	200 (50.00) 200 (50.00)	DALAPON MCPP	J(all detects) R(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_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-189-SA5B-SS-0.0-0.5MS **SL-189-SA5B-SS-0.0-0.5MSD** (SED-011-SIV-SD-0.0-0.5 SED-013-SIV-SD-0.0-0.5 SED-017-SIV-SD-0.0-0.5 SED-019-SIV-SD-0.0-0.5 SED-020-SIV-SD-0.0-0.5 SL-147-SA5B-SS-0.0-0.5 SL-169-SA5B-SS-0.0-0.5 SL-172-SA5B-SS-0.0-0.5 SL-173-SA5B-SS-0.0-0.5 SL-176-SA5B-SS-0.0-0.5 SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5)	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	299 188 181 213 137 156 290 183 163 184 289 354	300 198 179 238 142 167 369 192 167 185 314 384	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 75.00-125.00 75.00-125.00	- - - - - - - - - - - -	ARSENIC BERYLLIUM CADMIUM CHROMIUM COBALT COPPER LEAD NICKEL SILVER THALLIUM VANADIUM ZINC	J(all detects) Pb, Zn No Qual, >4x
SL-189-SA5B-SS-0.0-0.5MS **SL-189-SA5B-SS-0.0-0.5MSD** (SED-011-SIV-SD-0.0-0.5 SED-013-SIV-SD-0.0-0.5 SED-017-SIV-SD-0.0-0.5 SED-019-SIV-SD-0.0-0.5 SED-020-SIV-SD-0.0-0.5 SL-147-SA5B-SS-0.0-0.5 SL-169-SA5B-SS-0.0-0.5 SL-172-SA5B-SS-0.0-0.5 SL-173-SA5B-SS-0.0-0.5 SL-176-SA5B-SS-0.0-0.5 SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5)	ANTIMONY	62	56	75.00-125.00	-	ANTIMONY	J(all detects) UJ(all non-detects)
SL-189-SA5B-SS-0.0-0.5MS **SL-189-SA5B-SS-0.0-0.5MSD** (SED-011-SIV-SD-0.0-0.5 SED-013-SIV-SD-0.0-0.5 SED-017-SIV-SD-0.0-0.5 SED-019-SIV-SD-0.0-0.5 SED-020-SIV-SD-0.0-0.5 SL-147-SA5B-SS-0.0-0.5 SL-169-SA5B-SS-0.0-0.5 SL-172-SA5B-SS-0.0-0.5 SL-173-SA5B-SS-0.0-0.5 SL-176-SA5B-SS-0.0-0.5 SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5)	MOLYBDENUM	169	177	75.00-125.00	-	MOLYBDENUM	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: DE042 **Laboratory: LL**

EDD Filename: DE042_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-189-SA5B-SS-0.0-0.5MS	BARIUM	599	627	75.00-125.00	-	BARIUM	
SL-189-SA5B-SS-0.0-0.5MSD							
(SED-011-SIV-SD-0.0-0.5							
SED-013-SIV-SD-0.0-0.5							
SED-017-SIV-SD-0.0-0.5							
SED-019-SIV-SD-0.0-0.5							
SED-020-SIV-SD-0.0-0.5							
SL-147-SA5B-SS-0.0-0.5							
SL-169-SA5B-SS-0.0-0.5							
SL-172-SA5B-SS-0.0-0.5							
SL-173-SA5B-SS-0.0-0.5							
SL-176-SA5B-SS-0.0-0.5							No Qual, >4x
SL-178-SA5B-SS-0.0-0.5							
SL-186-SA5B-SS-0.0-0.5							
SL-187-SA5B-SS-0.0-0.5							
SL-189-SA5B-SS-0.0-0.5							
SL-192-SA5B-SS-0.0-0.5							
SL-194-SA5B-SS-0.0-0.5							
SL-196-SA5B-SS-0.0-0.5							
SL-198-SA5B-SS-0.0-0.5							
SL-199-SA5B-SS-0.0-0.5							
SL-202-SA5B-SS-0.0-0.5)							

Method: 6010B
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SL-189-SA5B-SS-0.0-0.5MS	ALUMINUM	1508	1850	75.00-125.00	-	ALUMINUM	
SL-189-SA5B-SS-0.0-0.5MSD	CALCIUM	-	136	75.00-125.00	-	CALCIUM	
(SED-011-SIV-SD-0.0-0.5	MAGNESIUM	156	302	75.00-125.00	-	MAGNESIUM	
SED-013-SIV-SD-0.0-0.5	POTASSIUM	-	144	75.00-125.00	-	POTASSIUM	
SED-017-SIV-SD-0.0-0.5	TITANIUM	288	359	75.00-125.00	-	TITANIUM	
SED-019-SIV-SD-0.0-0.5							
SED-020-SIV-SD-0.0-0.5							
SL-147-SA5B-SS-0.0-0.5							
SL-169-SA5B-SS-0.0-0.5							
SL-172-SA5B-SS-0.0-0.5							
SL-173-SA5B-SS-0.0-0.5							
SL-176-SA5B-SS-0.0-0.5							J(all detects)
SL-178-SA5B-SS-0.0-0.5							
SL-186-SA5B-SS-0.0-0.5							Al, Ca, Mg, Ti
SL-187-SA5B-SS-0.0-0.5							No Qual, >4x
SL-189-SA5B-SS-0.0-0.5							
SL-192-SA5B-SS-0.0-0.5							
SL-194-SA5B-SS-0.0-0.5							
SL-196-SA5B-SS-0.0-0.5							
SL-198-SA5B-SS-0.0-0.5							
SL-199-SA5B-SS-0.0-0.5							
SL-202-SA5B-SS-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_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-189-SA5B-SS-0.0-0.5MS SL-189-SA5B-SS-0.0-0.5MSD (SED-011-SIV-SD-0.0-0.5 SED-013-SIV-SD-0.0-0.5 SED-017-SIV-SD-0.0-0.5 SED-019-SIV-SD-0.0-0.5 SED-020-SIV-SD-0.0-0.5 SL-147-SA5B-SS-0.0-0.5 SL-169-SA5B-SS-0.0-0.5 SL-172-SA5B-SS-0.0-0.5 SL-173-SA5B-SS-0.0-0.5 SL-176-SA5B-SS-0.0-0.5 SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5)	IRON	-871	1520	75.00-125.00	-	IRON	No Qual, >4x
SL-189-SA5B-SS-0.0-0.5MS SL-189-SA5B-SS-0.0-0.5MSD (SED-011-SIV-SD-0.0-0.5 SED-013-SIV-SD-0.0-0.5 SED-017-SIV-SD-0.0-0.5 SED-019-SIV-SD-0.0-0.5 SED-020-SIV-SD-0.0-0.5 SL-147-SA5B-SS-0.0-0.5 SL-169-SA5B-SS-0.0-0.5 SL-172-SA5B-SS-0.0-0.5 SL-173-SA5B-SS-0.0-0.5 SL-176-SA5B-SS-0.0-0.5 SL-178-SA5B-SS-0.0-0.5 SL-186-SA5B-SS-0.0-0.5 SL-187-SA5B-SS-0.0-0.5 SL-189-SA5B-SS-0.0-0.5 SL-192-SA5B-SS-0.0-0.5 SL-194-SA5B-SS-0.0-0.5 SL-196-SA5B-SS-0.0-0.5 SL-198-SA5B-SS-0.0-0.5 SL-199-SA5B-SS-0.0-0.5 SL-202-SA5B-SS-0.0-0.5)	MANGANESE PHOSPHORUS	62 64	174 -	75.00-125.00 75.00-125.00	- -	MANGANESE PHOSPHORUS	J(all detects) UJ(all non-detects) Mn 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-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	BENZOIC ACID	-	-	10.00-173.00	78 (30.00)	BENZOIC ACID	J(all detects)
SL-189-SA5B-SS-0.0-0.5MS SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	BENZIDINE	0	0	35.00-141.00	-	BENZIDINE	J(all detects) R(all non-detects)
SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	2,4-DIMETHYLPHENOL ANILINE	- -	75 26	78.00-110.00 35.00-95.00	- 34 (30.00)	2,4-DIMETHYLPHENOL ANILINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_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-189-SA5B-SS-0.0-0.5MS SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	BIS(2-ETHYLHEXYL)PHTHALAT	169	-	39.00-167.00	37 (30.00)	BIS(2-ETHYLHEXYL)PHTHALA	J(all detects)
SL-189-SA5B-SS-0.0-0.5MS SL-189-SA5B-SS-0.0-0.5MSD (SL-189-SA5B-SS-0.0-0.5)	Diethylphthalate	81	81	87.00-131.00	-	Diethylphthalate	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-176-SA5B-SS-0.0-0.5DUP (SED-011-SIV-SD-0.0-0.5 SED -013-SIV-SD-0.0-0.5 SED -017-SIV-SD-0.0-0.5 SED -019-SIV-SD-0.0-0.5 SED -020-SIV-SD-0.0-0.5 SL -147-SA5B-SS-0.0-0.5 SL -169-SA5B-SS-0.0-0.5 SL -172-SA5B-SS-0.0-0.5 SL -173-SA5B-SS-0.0-0.5 SL -176-SA5B-SS-0.0-0.5)	FLUORIDE	38	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SL-189-SA5B-SS-0.0-0.5DUP (SED-011-SIV-SD-0.0-0.5 SED -013-SIV-SD-0.0-0.5 SED -017-SIV-SD-0.0-0.5 SED -019-SIV-SD-0.0-0.5 SED -020-SIV-SD-0.0-0.5 SL -147-SA5B-SS-0.0-0.5 SL -169-SA5B-SS-0.0-0.5 SL -172-SA5B-SS-0.0-0.5 SL -173-SA5B-SS-0.0-0.5 SL -176-SA5B-SS-0.0-0.5 SL -178-SA5B-SS-0.0-0.5 SL -186-SA5B-SS-0.0-0.5 SL -187-SA5B-SS-0.0-0.5 SL -189-SA5B-SS-0.0-0.5 SL -192-SA5B-SS-0.0-0.5 SL -194-SA5B-SS-0.0-0.5 SL -196-SA5B-SS-0.0-0.5 SL -198-SA5B-SS-0.0-0.5 SL -199-SA5B-SS-0.0-0.5 SL -202-SA5B-SS-0.0-0.5)	ARSENIC	36	20.00	J(all detects) UJ(all non-detects) Cd No Qual OK by difference
	BARIUM	24	20.00	
	BERYLLIUM	27	20.00	
	CADMIUM	34	20.00	
	CHROMIUM	29	20.00	
	COPPER	21	20.00	
	LEAD	27	20.00	
	NICKEL	25	20.00	
	VANADIUM	24	20.00	
	ZINC	30	20.00	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: PrepDE042_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
P03564AQ242306A P03564AY242248A (SED-011-SIV-SD-0.0-0.5 SED -013-SIV-SD-0.0-0.5 SED -017-SIV-SD-0.0-0.5 SED -019-SIV-SD-0.0-0.5 SED -020-SIV-SD-0.0-0.5 SL -147-SA5B-SS-0.0-0.5 SL -169-SA5B-SS-0.0-0.5 SL -172-SA5B-SS-0.0-0.5 SL -173-SA5B-SS-0.0-0.5 SL -176-SA5B-SS-0.0-0.5 SL -178-SA5B-SS-0.0-0.5 SL -186-SA5B-SS-0.0-0.5 SL -187-SA5B-SS-0.0-0.5 SL -189-SA5B-SS-0.0-0.5 SL -192-SA5B-SS-0.0-0.5 SL -194-SA5B-SS-0.0-0.5 SL -196-SA5B-SS-0.0-0.5 SL -198-SA5B-SS-0.0-0.5 SL -199-SA5B-SS-0.0-0.5 SL -202-SA5B-SS-0.0-0.5)	Aroclor 5442	68	61	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
P03622AQ242120A (SED-011-SIV-SD-0.0-0.5 SED -013-SIV-SD-0.0-0.5 SED -017-SIV-SD-0.0-0.5 SED -019-SIV-SD-0.0-0.5 SED -020-SIV-SD-0.0-0.5 SL -147-SA5B-SS-0.0-0.5 SL -169-SA5B-SS-0.0-0.5 SL -172-SA5B-SS-0.0-0.5 SL -173-SA5B-SS-0.0-0.5 SL -176-SA5B-SS-0.0-0.5 SL -178-SA5B-SS-0.0-0.5 SL -186-SA5B-SS-0.0-0.5 SL -187-SA5B-SS-0.0-0.5 SL -189-SA5B-SS-0.0-0.5 SL -192-SA5B-SS-0.0-0.5 SL -194-SA5B-SS-0.0-0.5 SL -196-SA5B-SS-0.0-0.5 SL -198-SA5B-SS-0.0-0.5 SL -199-SA5B-SS-0.0-0.5 SL -202-SA5B-SS-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: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8081A**
Matrix: **SO**

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-011-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	188	20.00-120.00	All Target Analytes	J (all detects)
SED-013-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	241	20.00-120.00	All Target Analytes	J(all detects)
SED-017-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	48	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SED-019-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	190	20.00-120.00	All Target Analytes	No Qual Diluted Out
SED-020-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	176	20.00-120.00	All Target Analytes	J(all detects)
SL-176-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	No Qual Diluted Out
SL-178-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	216	20.00-120.00	All Target Analytes	No Qual Diluted Out
SL-187-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-192-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	No Qual Diluted Out
SL-194-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-196-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SL-202-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	289	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-178-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL	145	45.00-120.00	All Target Analytes	No Qual Diluted Out
SL-199-SA5B-SS-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	124 151	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SS-0.0-0.5	FLUORIDE	J	0.95	1.1	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	SODIUM	J	75.3	108	PQL	mg/Kg	J (all detects)
	TIN	J	2.50	10.8	PQL	mg/Kg	
SED-013-SIV-SD-0.0-0.5	BORON	J	4.43	5.75	PQL	mg/Kg	J (all detects)
	SODIUM	J	112	115	PQL	mg/Kg	
	TIN	J	2.83	11.5	PQL	mg/Kg	
SED-017-SIV-SD-0.0-0.5	SODIUM	J	79.4	111	PQL	mg/Kg	J (all detects)
	TIN	J	2.51	11.1	PQL	mg/Kg	
	Zirconium	J	1.45	5.54	PQL	mg/Kg	
SED-019-SIV-SD-0.0-0.5	BORON	J	6.31	6.48	PQL	mg/Kg	J (all detects)
	TIN	J	3.05	13.0	PQL	mg/Kg	
	Zirconium	J	1.15	6.48	PQL	mg/Kg	
SED-020-SIV-SD-0.0-0.5	BORON	J	3.88	5.33	PQL	mg/Kg	J (all detects)
	SODIUM	J	60.8	107	PQL	mg/Kg	
	TIN	J	2.28	10.7	PQL	mg/Kg	
SL-147-SA5B-SS-0.0-0.5	BORON	J	4.18	5.72	PQL	mg/Kg	J (all detects)
	TIN	J	2.28	11.4	PQL	mg/Kg	
	Zirconium	J	1.47	5.72	PQL	mg/Kg	
SL-169-SA5B-SS-0.0-0.5	SODIUM	J	105	110	PQL	mg/Kg	J (all detects)
	TIN	J	2.79	11.0	PQL	mg/Kg	
	Zirconium	J	1.96	5.50	PQL	mg/Kg	
SL-172-SA5B-SS-0.0-0.5	BORON	J	4.12	5.30	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.7	106	PQL	mg/Kg	
	TIN	J	2.29	10.6	PQL	mg/Kg	
	Zirconium	J	1.11	5.30	PQL	mg/Kg	
SL-173-SA5B-SS-0.0-0.5	BORON	J	3.94	5.18	PQL	mg/Kg	J (all detects)
	SODIUM	J	79.3	104	PQL	mg/Kg	
	TIN	J	2.36	10.4	PQL	mg/Kg	
	Zirconium	J	1.53	5.18	PQL	mg/Kg	
SL-176-SA5B-SS-0.0-0.5	BORON	J	3.62	5.01	PQL	mg/Kg	J (all detects)
	TIN	J	2.12	10.0	PQL	mg/Kg	
	Zirconium	J	1.27	5.01	PQL	mg/Kg	
SL-178-SA5B-SS-0.0-0.5	BORON	J	5.32	6.23	PQL	mg/Kg	J (all detects)
	TIN	J	3.39	12.5	PQL	mg/Kg	
	Zirconium	J	1.36	6.23	PQL	mg/Kg	
SL-186-SA5B-SS-0.0-0.5	BORON	J	4.32	5.27	PQL	mg/Kg	J (all detects)
	SODIUM	J	104	105	PQL	mg/Kg	
	TIN	J	2.43	10.5	PQL	mg/Kg	
	Zirconium	J	1.98	5.27	PQL	mg/Kg	
SL-187-SA5B-SS-0.0-0.5	BORON	J	3.97	5.24	PQL	mg/Kg	J (all detects)
	TIN	J	2.27	10.5	PQL	mg/Kg	
	Zirconium	J	2.18	5.24	PQL	mg/Kg	
SL-189-SA5B-SS-0.0-0.5	BORON	J	4.10	5.11	PQL	mg/Kg	J (all detects)
	SODIUM	J	91.0	102	PQL	mg/Kg	
	TIN	J	2.31	10.2	PQL	mg/Kg	
	Zirconium	J	2.16	5.11	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-192-SA5B-SS-0.0-0.5	BORON	J	3.00	5.13	PQL	mg/Kg	J (all detects)
	SODIUM	J	86.3	103	PQL	mg/Kg	
	TIN	J	2.02	10.3	PQL	mg/Kg	
	Zirconium	J	1.38	5.13	PQL	mg/Kg	
SL-194-SA5B-SS-0.0-0.5	BORON	J	3.76	5.43	PQL	mg/Kg	J (all detects)
	SODIUM	J	98.5	109	PQL	mg/Kg	
	TIN	J	2.67	10.9	PQL	mg/Kg	
	Zirconium	J	1.63	5.43	PQL	mg/Kg	
SL-196-SA5B-SS-0.0-0.5	BORON	J	3.62	5.02	PQL	mg/Kg	J (all detects)
	TIN	J	2.24	10.0	PQL	mg/Kg	
	Zirconium	J	2.34	5.02	PQL	mg/Kg	
SL-198-SA5B-SS-0.0-0.5	BORON	J	4.82	5.14	PQL	mg/Kg	J (all detects)
	SODIUM	J	96.2	103	PQL	mg/Kg	
	TIN	J	2.30	10.3	PQL	mg/Kg	
	Zirconium	J	1.81	5.14	PQL	mg/Kg	
SL-199-SA5B-SS-0.0-0.5	BORON	J	4.89	5.32	PQL	mg/Kg	J (all detects)
	SODIUM	J	93.2	106	PQL	mg/Kg	
	TIN	J	2.28	10.6	PQL	mg/Kg	
	Zirconium	J	1.53	5.32	PQL	mg/Kg	
SL-202-SA5B-SS-0.0-0.5	BORON	J	4.42	5.31	PQL	mg/Kg	J (all detects)
	SODIUM	J	93.3	106	PQL	mg/Kg	
	TIN	J	2.61	10.6	PQL	mg/Kg	
	Zirconium	J	1.47	5.31	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	ANTIMONY	J	0.189	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.148	0.441	PQL	mg/Kg	
	SILVER	J	0.0437	0.110	PQL	mg/Kg	
SED-013-SIV-SD-0.0-0.5	ANTIMONY	J	0.188	0.219	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.207	0.438	PQL	mg/Kg	
	SILVER	J	0.0981	0.109	PQL	mg/Kg	
SED-017-SIV-SD-0.0-0.5	ANTIMONY	J	0.210	0.222	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.120	0.443	PQL	mg/Kg	
SED-019-SIV-SD-0.0-0.5	SELENIUM	J	0.202	0.523	PQL	mg/Kg	J (all detects)
SED-020-SIV-SD-0.0-0.5	ANTIMONY	J	0.191	0.209	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0829	0.418	PQL	mg/Kg	
	SILVER	J	0.0561	0.105	PQL	mg/Kg	
SL-147-SA5B-SS-0.0-0.5	SELENIUM	J	0.143	0.458	PQL	mg/Kg	J (all detects)
SL-169-SA5B-SS-0.0-0.5	SELENIUM	J	0.132	0.445	PQL	mg/Kg	J (all detects)
SL-172-SA5B-SS-0.0-0.5	SELENIUM	J	0.119	0.424	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0762	0.106	PQL	mg/Kg	
SL-173-SA5B-SS-0.0-0.5	SELENIUM	J	0.118	0.410	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0930	0.103	PQL	mg/Kg	
SL-176-SA5B-SS-0.0-0.5	ANTIMONY	J	0.192	0.210	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0667	0.421	PQL	mg/Kg	
SL-178-SA5B-SS-0.0-0.5	SELENIUM	J	0.183	0.508	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-186-SA5B-SS-0.0-0.5	SELENIUM	J	0.109	0.409	PQL	mg/Kg	J (all detects)
SL-187-SA5B-SS-0.0-0.5	ANTIMONY	J	0.188	0.212	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.117	0.424	PQL	mg/Kg	
	SILVER	J	0.0889	0.106	PQL	mg/Kg	
SL-189-SA5B-SS-0.0-0.5	ANTIMONY	J	0.212	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.143	0.430	PQL	mg/Kg	
	SILVER	J	0.100	0.107	PQL	mg/Kg	
SL-192-SA5B-SS-0.0-0.5	SELENIUM	J	0.118	0.410	PQL	mg/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	ANTIMONY	J	0.209	0.215	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.132	0.431	PQL	mg/Kg	
	SILVER	J	0.0775	0.108	PQL	mg/Kg	
SL-196-SA5B-SS-0.0-0.5	SELENIUM	J	0.135	0.401	PQL	mg/Kg	J (all detects)
SL-198-SA5B-SS-0.0-0.5	SELENIUM	J	0.126	0.419	PQL	mg/Kg	J (all detects)
SL-199-SA5B-SS-0.0-0.5	ANTIMONY	J	0.157	0.211	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.204	0.421	PQL	mg/Kg	
	SILVER	J	0.0725	0.105	PQL	mg/Kg	
SL-202-SA5B-SS-0.0-0.5	ANTIMONY	J	0.189	0.206	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.0909	0.412	PQL	mg/Kg	
	SILVER	J	0.0856	0.103	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.60	1.1	PQL	mg/Kg	J (all detects)
SED-013-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.95	1.1	PQL	mg/Kg	J (all detects)
SED-017-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SL-172-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-173-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-176-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.90	1.1	PQL	mg/Kg	J (all detects)
SL-186-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.88	1.1	PQL	mg/Kg	J (all detects)
SL-187-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.69	1.1	PQL	mg/Kg	J (all detects)
SL-189-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.58	1.1	PQL	mg/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.36	1.1	PQL	mg/Kg	J (all detects)
SL-196-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.72	1.1	PQL	mg/Kg	J (all detects)
SL-198-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.70	1.1	PQL	mg/Kg	J (all detects)
SL-199-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.76	1.1	PQL	mg/Kg	J (all detects)
SL-202-SA5B-SS-0.0-0.5	HEXAVALENT CHROMIUM	J	0.86	1.1	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-013-SIV-SD-0.0-0.5	MERCURY	J	0.0198	0.109	PQL	mg/Kg	J (all detects)
SED-017-SIV-SD-0.0-0.5	MERCURY	J	0.0741	0.107	PQL	mg/Kg	J (all detects)
SED-020-SIV-SD-0.0-0.5	MERCURY	J	0.0051	0.105	PQL	mg/Kg	J (all detects)
SL-169-SA5B-SS-0.0-0.5	MERCURY	J	0.0119	0.110	PQL	mg/Kg	J (all detects)
SL-173-SA5B-SS-0.0-0.5	MERCURY	J	0.0053	0.0986	PQL	mg/Kg	J (all detects)
SL-176-SA5B-SS-0.0-0.5	MERCURY	J	0.0109	0.104	PQL	mg/Kg	J (all detects)
SL-186-SA5B-SS-0.0-0.5	MERCURY	J	0.0212	0.102	PQL	mg/Kg	J (all detects)
SL-187-SA5B-SS-0.0-0.5	MERCURY	J	0.0130	0.104	PQL	mg/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	MERCURY	J	0.101	0.103	PQL	mg/Kg	J (all detects)
SL-196-SA5B-SS-0.0-0.5	MERCURY	J	0.0267	0.0989	PQL	mg/Kg	J (all detects)
SL-198-SA5B-SS-0.0-0.5	MERCURY	J	0.0108	0.0992	PQL	mg/Kg	J (all detects)
SL-199-SA5B-SS-0.0-0.5	MERCURY	J	0.0067	0.100	PQL	mg/Kg	J (all detects)
SL-202-SA5B-SS-0.0-0.5	MERCURY	J	0.0503	0.102	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	ENDOSULFAN I	J	0.13	0.18	PQL	ug/Kg	J (all detects)
SED-013-SIV-SD-0.0-0.5	DELTA-BHC	J	0.071	0.19	PQL	ug/Kg	J (all detects)
SED-019-SIV-SD-0.0-0.5	DELTA-BHC	J	0.29	1.1	PQL	ug/Kg	J (all detects)
SED-020-SIV-SD-0.0-0.5	DELTA-BHC	J	0.075	0.18	PQL	ug/Kg	J (all detects)
SL-169-SA5B-SS-0.0-0.5	ALPHA-BHC DELTA-BHC	J J	0.057 0.056	0.19 0.19	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-172-SA5B-SS-0.0-0.5	ALPHA-BHC DELTA-BHC gamma-BHC (Lindane)	J J J	0.090 0.15 0.036	0.18 0.18 0.18	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-176-SA5B-SS-0.0-0.5	HEPTACHLOR	J	0.46	0.87	PQL	ug/Kg	J (all detects)
SL-186-SA5B-SS-0.0-0.5	BETA-BHC	J	0.080	0.18	PQL	ug/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	ALPHA-BHC	J	0.14	0.18	PQL	ug/Kg	J (all detects)
SL-196-SA5B-SS-0.0-0.5	ALDRIN ALPHA-BHC gamma-BHC (Lindane)	J J J	0.084 0.043 0.048	0.17 0.17 0.17	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-198-SA5B-SS-0.0-0.5	BETA-BHC	J	0.14	0.18	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	1.1 2.6	1.9 3.6	PQL PQL	ug/Kg ug/Kg	J (all detects)
SED-020-SIV-SD-0.0-0.5	AROCLOR 1254 Aroclor 5460	J J	2.5 6.6	3.7 7.2	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-169-SA5B-SS-0.0-0.5	Aroclor 5460	J	7.0	7.5	PQL	ug/Kg	J (all detects)
SL-172-SA5B-SS-0.0-0.5	AROCLOR 1260 Aroclor 5460	J J	0.92 2.1	1.8 3.5	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-186-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	3.0 1.1 5.0	3.7 3.7 7.1	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-189-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260 Aroclor 5460	J J J	1.3 0.86 2.7	1.8 1.8 3.5	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SL-192-SA5B-SS-0.0-0.5	AROCLOR 1254 AROCLOR 1260	J J	3.3 5.5	9.1 9.1	PQL PQL	ug/Kg ug/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	Aroclor 5460	J	3.0	3.7	PQL	ug/Kg	J (all detects)
SL-198-SA5B-SS-0.0-0.5	Aroclor 5460	J	3.2	3.5	PQL	ug/Kg	J (all detects)
SL-202-SA5B-SS-0.0-0.5	Aroclor 5460	J	2.2	3.5	PQL	ug/Kg	J (all detects)

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	2,4-D DICAMBA	J J	1.9 0.59	4.0 1.3	PQL PQL	ug/Kg ug/Kg	J (all detects)
SED-013-SIV-SD-0.0-0.5	DICAMBA	J	0.78	1.4	PQL	ug/Kg	J (all detects)
SED-017-SIV-SD-0.0-0.5	2,4-D DICAMBA MCPP	J J J	1.9 0.49 220	4.1 1.4 280	PQL PQL PQL	ug/Kg ug/Kg ug/Kg	J (all detects)
SED-019-SIV-SD-0.0-0.5	DICAMBA	J	0.73	1.6	PQL	ug/Kg	J (all detects)
SED-020-SIV-SD-0.0-0.5	DICAMBA	J	0.57	1.3	PQL	ug/Kg	J (all detects)
SL-147-SA5B-SS-0.0-0.5	MCPA	J	260	290	PQL	ug/Kg	J (all detects)
SL-176-SA5B-SS-0.0-0.5	DICHLOROPROP	J	1.4	1.8	PQL	ug/Kg	J (all detects)
SL-178-SA5B-SS-0.0-0.5	DICAMBA	J	0.55	1.5	PQL	ug/Kg	J (all detects)
SL-187-SA5B-SS-0.0-0.5	DICAMBA	J	0.52	1.3	PQL	ug/Kg	J (all detects)
SL-189-SA5B-SS-0.0-0.5	DICAMBA	J	0.49	1.3	PQL	ug/Kg	J (all detects)
SL-192-SA5B-SS-0.0-0.5	DICAMBA	J	0.84	1.3	PQL	ug/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	DICAMBA	J	0.46	1.3	PQL	ug/Kg	J (all detects)
SL-199-SA5B-SS-0.0-0.5	MCPP	J	220	270	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	95	370	PQL	ug/Kg	J (all detects)
SED-013-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	28	380	PQL	ug/Kg	J (all detects)
SED-017-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	51	380	PQL	ug/Kg	J (all detects)
SED-019-SIV-SD-0.0-0.5	BENZO(A)ANTHRACENE	J	24	220	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	120	450	PQL	ug/Kg	
	Butylbenzylphthalate	J	42	220	PQL	ug/Kg	
	CHRYSENE	J	37	220	PQL	ug/Kg	
	Di-n-butylphthalate	J	26	220	PQL	ug/Kg	
	FLUORANTHENE	J	71	220	PQL	ug/Kg	
	PYRENE	J	47	220	PQL	ug/Kg	
SL-147-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	44	380	PQL	ug/Kg	J (all detects)
SL-169-SA5B-SS-0.0-0.5	BENZO(G,H,I)PERYLENE	J	72	190	PQL	ug/Kg	J (all detects)
	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	380	PQL	ug/Kg	
	FLUORANTHENE	J	21	190	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	82	190	PQL	ug/Kg	
SL-173-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	49	360	PQL	ug/Kg	J (all detects)
SL-178-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	43	430	PQL	ug/Kg	J (all detects)
SL-186-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	360	PQL	ug/Kg	J (all detects)
SL-187-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	81	350	PQL	ug/Kg	J (all detects)
SL-192-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	47	360	PQL	ug/Kg	J (all detects)
SL-194-SA5B-SS-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	20	370	PQL	ug/Kg	J (all detects)
SL-202-SA5B-SS-0.0-0.5	FLUORANTHENE	J	59	180	PQL	ug/Kg	J (all detects)
	PYRENE	J	57	180	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-011-SIV-SD-0.0-0.5	ANTHRACENE	J	0.40	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.6	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	1.8	PQL	ug/Kg	
	Di-n-octylphthalate	J	8.6	20	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.8	PQL	ug/Kg	
SED-013-SIV-SD-0.0-0.5	BENZO(A)ANTHRACENE	J	1.7	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	1.3	1.9	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	1.9	PQL	ug/Kg	
SED-017-SIV-SD-0.0-0.5	CHRYSENE	J	1.8	1.9	PQL	ug/Kg	J (all detects)
SED-019-SIV-SD-0.0-0.5	ANTHRACENE	J	6.0	11	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	9.7	11	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	8.6	11	PQL	ug/Kg	
	NAPHTHALENE	J	9.0	11	PQL	ug/Kg	
SL-169-SA5B-SS-0.0-0.5	ACENAPHTHYLENE	J	0.90	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-172-SA5B-SS-0.0-0.5	2-METHYLNAPHTHALENE	J	0.86	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(A)PYRENE	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	1.1	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.82	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.94	1.8	PQL	ug/Kg	
SL-173-SA5B-SS-0.0-0.5	ACENAPHTHENE	J	1.6	1.8	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.94	1.8	PQL	ug/Kg	
	ANTHRACENE	J	1.4	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	
	FLUORENE	J	1.3	1.8	PQL	ug/Kg	
SL-176-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.95	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.0	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	1.4	1.8	PQL	ug/Kg	
SL-178-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.86	2.1	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.3	2.1	PQL	ug/Kg	
	ANTHRACENE	J	0.87	2.1	PQL	ug/Kg	
	Butylbenzylphthalate	J	8.8	23	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.2	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.2	2.1	PQL	ug/Kg	
SL-186-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.6	1.8	PQL	ug/Kg	
	ACENAPHTHYLENE	J	0.94	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.6	1.8	PQL	ug/Kg	
SL-189-SA5B-SS-0.0-0.5	BENZO(B)FLUORANTHENE	J	0.85	1.8	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.96	1.8	PQL	ug/Kg	
SL-192-SA5B-SS-0.0-0.5	ACENAPHTHYLENE	J	0.44	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	0.80	1.8	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-194-SA5B-SS-0.0-0.5	ACENAPHTHYLENE	J	0.45	1.8	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.2	1.8	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.5	1.8	PQL	ug/Kg	
SL-196-SA5B-SS-0.0-0.5	1-METHYLNAPHTHALENE	J	0.96	1.8	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	1.1	1.8	PQL	ug/Kg	
	ANTHRACENE	J	0.41	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.3	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.93	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.96	1.8	PQL	ug/Kg	
SL-198-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	3.9	8.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	8.6	8.9	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	7.6	8.9	PQL	ug/Kg	
	FLUORANTHENE	J	4.5	8.9	PQL	ug/Kg	
	PHENANTHRENE	J	4.7	8.9	PQL	ug/Kg	
	PYRENE	J	4.4	8.9	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE042 **Laboratory: LL**

EDD Filename: DE042_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SL-199-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	1.3	1.8	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.4	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.0	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.5	19	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.94	1.8	PQL	ug/Kg	
	NAPHTHALENE	J	0.77	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.2	1.8	PQL	ug/Kg	
	PYRENE	J	1.7	1.8	PQL	ug/Kg	
SL-202-SA5B-SS-0.0-0.5	BENZO(A)ANTHRACENE	J	6.4	8.9	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	6.0	8.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	4.4	8.9	PQL	ug/Kg	
	CHRYSENE	J	8.6	8.9	PQL	ug/Kg	
	PHENANTHRENE	J	4.8	8.9	PQL	ug/Kg	

LDC #: 25550C4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/6/11
SDG #: DE042 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, Pb, Mg, Mn, Ti, Zn >4x)
VII.	Duplicate Sample Analysis	N	Dup (Cd <5x)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	J/UJ/A (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:

1	SED-011-SIV-SD-0.0-0.5	11	SL-178-SA5B-SS-0.0-0.05	21	SL-189-SA5B-SS-0.0-0.05MS	31	
2	SED-013-SIV-SD-0.0-0.5	12	SL-186-SA5B-SS-0.0-0.05	22	SL-189-SA5B-SS-0.0-0.05MSD	32	
3	SED-017-SIV-SD-0.0-0.5	13	SL-187-SA5B-SS-0.0-0.05	23	SL-189-SA5B-SS-0.0-0.05DUP	33	
4	SED-019-SIV-SD-0.0-0.5	14	SL-189-SA5B-SS-0.0-0.05	24		34	
5	SED-020-SIV-SD-0.0-0.5	15	SL-192-SA5B-SS-0.0-0.05	25		35	
6	SL-147-SA5B-SS-0.0-0.05	16	SL-194-SA5B-SS-0.0-0.05	26		36	
7	SL-169-SA5B-SS-0.0-0.05	17	SL-196-SA5B-SS-0.0-0.05	27		37	
8	SL-172-SA5B-SS-0.0-0.05	18	SL-198-SA5B-SS-0.0-0.05	28		38	
9	SL-173-SA5B-SS-0.0-0.05	19	SL-199-SA5B-SS-0.0-0.05	29		39	
10	SL-176-SA5B-SS-0.0-0.05	20	SL-202-SA5B-SS-0.0-0.05	30		40	

Notes:

LDC #: 25550-4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer: ✓

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-20		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: 21-23		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Analysis Method
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, ~~Sr, Sn, Ti, Zr~~
ICP-MS		Sb, ~~As, Ba, Be,~~ Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25550C4

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 ICPMS (2dil)
Sample Concentration units, unless otherwise noted: ug/L Associated Samples: All Reason: B

Analyte	Maximum ICB/CCB[a] (ug/L)	Action Limit	1	2	3	5	6	7	8	9	10	12	13	14	15	16	17	19	20	
Sb	0.33	0.33	0.19	0.19	0.21	0.19	0.32	0.24	0.21	0.22	0.19	0.22	0.19	0.21	0.25	0.21	0.21	0.16	0.19	

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.: DE042
Matrix: SOIL Level (low/med): LOW

Background Lab Sample ID: 6167481BKG Serial Dilution Lab Sample ID: 6167481L
Batch ID(s): P35408B, P35426B
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Aluminum		139327.9700		135574.3500		3		P
Antimony	121	0.9861	B	1.5000	U	100		MS
Arsenic	75	25.4300		30.8400		21		MS
Barium	137	551.8000		637.5000		16	E	MS
Beryllium	9	2.9430		3.3320		13		MS
Boron		40.1100	B	70.0000	B	75		P
Cadmium	111	1.0690		1.1805	B	10		MS
Calcium		30495.6600		32283.6000		6		P
Chromium	52	94.9100		127.5000		34	E	MS
Cobalt	59	30.4400		51.2000		68	E	MS
Copper	63	50.4500		70.7500		40	E	MS
Iron		183079.3200		180921.8500		1		P
Lead	208	64.1700		76.2000		19	E	MS
Lithium		161.7500		180.7000		12	E	P
Magnesium		32831.9100		34726.7500		6		P
Manganese		3319.5000		3469.5000		5		P
Molybdenum	98	3.9050		6.5800		69		MS
Nickel	60	64.0700		89.9500		40	E	MS
Phosphorus		2368.3100		2452.7500		4		P
Potassium		27995.6800		29640.5000		6		P
Selenium	78	0.6638	B	1.0000	U	100		MS
Silver	107	0.4671	B	1.8965	B	306		MS
Sodium		889.4100	B	1865.0000	U	100		P
Strontium		224.0500		231.1000		3		P
Thallium	203	1.6650		1.8905	B	14		MS
Tin		22.5800	B	50.0000	U	100		P
Titanium		11411.6600		11969.7000		5		P
Vanadium	51	176.8000		236.6500		34	E	MS
Zinc	66	266.9000		297.4000		11		MS
Zirconium		21.0900	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: DE642 3483
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

SAMPLE DELIVERY GROUP

DE045

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-Dec-2010	TB-121710	6169030	TB	5030B	8015M	III
17-Dec-2010	TB-121710	6169030	TB	5030B	8260B	III
17-Dec-2010	TB-121710	6169030	TB	5030B	8260B SIM	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3050B	6010B	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3050B	6020	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3060A	7199	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3550B	8081A	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3550B	8082	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3550B	8151A	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3550B	8270C	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	3550B	8270C SIM	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	Gen Prep	9045M	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	METHOD	300.0	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	METHOD	314.0	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5	6169019	N	METHOD	7471A	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5DUP	P169019D271620A	DUP	METHOD	314.0	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5DUP	P169019D271741A	DUP	METHOD	300.0	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5DUP	P169019D291545B	DUP	Gen Prep	9045M	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5MS	P169019R271643A	MS	METHOD	314.0	III
17-Dec-2010	SED-014-SIV-SD-0.0-0.5MS	P169019R271755A	MS	METHOD	300.0	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3050B	6010B	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3050B	6020	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3060A	7199	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3546	1625C	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3550B	8015B	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	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
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3550B	8082	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3550B	8270C	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	3550B	8270C SIM	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	5035	8015M	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	5035	8260B	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	5035	8260B SIM	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	8330	8330A	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	Gen Prep	9045M	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	300.0	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	314.0	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	7471A	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	8015B	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	8015M	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	8315A	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0	6169024	N	METHOD	9012B	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0MSD	P169024M321741A	MSD	3550B	8015B	III
17-Dec-2010	SL-282-SA5B-SB-4.0-5.0MS	P169024R321657A	MS	3550B	8015B	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3050B	6010B	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3050B	6020	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3060A	7199	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3550B	8081A	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3550B	8082	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3550B	8151A	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3550B	8270C	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	3550B	8270C SIM	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	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-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	METHOD	300.0	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	METHOD	314.0	III
17-Dec-2010	SED-012-SIV-SD-0.0-0.5	6169020	N	METHOD	7471A	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3050B	6010B	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3050B	6020	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3060A	7199	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3546	1625C	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3550B	8015B	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3550B	8015M	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3550B	8082	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3550B	8270C	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	3550B	8270C SIM	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	5035	8015M	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	5035	8260B	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	5035	8260B SIM	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	8330	8330A	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	Gen Prep	9045M	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	300.0	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	314.0	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	7471A	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	8015B	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	8015M	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	8315A	III
17-Dec-2010	SL-282-SA5B-SB-7.0-8.0	6169025	N	METHOD	9012B	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3050B	6010B	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	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-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3060A	7199	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3550B	8081A	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3550B	8082	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3550B	8151A	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3550B	8270C	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	3550B	8270C SIM	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	Gen Prep	9045M	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	METHOD	300.0	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	METHOD	314.0	III
17-Dec-2010	SED-004-SIV-SD-0.0-0.5	6169023	N	METHOD	7471A	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3050B	6010B	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3050B	6020	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3060A	7199	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3546	1625C	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3550B	8015B	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3550B	8015M	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3550B	8082	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3550B	8270C	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	3550B	8270C SIM	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	5035	8015M	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	5035	8260B	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	5035	8260B SIM	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	8330	8330A	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	Gen Prep	9045M	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	METHOD	300.0	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	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
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	METHOD	7471A	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	METHOD	8015B	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	METHOD	8015M	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	METHOD	8315A	III
17-Dec-2010	SL-281-SA5B-SB-4.0-5.0	6169026	N	METHOD	9012B	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	3005A	6010B	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	3020A	6020	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	3510C	8081A	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	3510C	8082	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	3510C	8270C	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	3510C	8270C SIM	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	Gen Prep	300.0	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	Gen Prep	314.0	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	Gen Prep	7199	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	METHOD	7470A	III
17-Dec-2010	EB05-SA5B-121710	6169017	EB	METHOD	8151A	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	3005A	6010B	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	3020A	6020	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	3510C	8081A	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	3510C	8082	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	3510C	8270C	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	3510C	8270C SIM	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	Gen Prep	300.0	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	Gen Prep	314.0	III
17-Dec-2010	EB01-SIV-121710	6169018	EB	Gen Prep	7199	III
17-Dec-2010	EB01-SIV-121710	6169018	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
17-Dec-2010	EB01-SIV-121710	6169018	EB	METHOD	8151A	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3050B	6010B	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3050B	6020	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3060A	7199	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3546	1625C	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3550B	8015B	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3550B	8015M	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3550B	8082	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3550B	8270C	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	3550B	8270C SIM	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	5035	8015M	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	5035	8260B	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	5035	8260B SIM	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	8330	8330A	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	Gen Prep	9045M	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	300.0	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	314.0	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	7471A	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	8015B	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	8015M	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	8315A	III
17-Dec-2010	SL-281-SA5B-SB-8.0-9.0	6169027	N	METHOD	9012B	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3050B	6010B	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3050B	6020	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3060A	7199	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3550B	8081A	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3550B	8082	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3550B	8151A	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3550B	8270C	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	3550B	8270C SIM	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	Gen Prep	9045M	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	METHOD	300.0	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	METHOD	314.0	III
17-Dec-2010	SED-001-SIV-SD-0.0-0.5	6169022	N	METHOD	7471A	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3050B	6010B	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3050B	6020	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3060A	7199	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3550B	8081A	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3550B	8082	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3550B	8151A	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3550B	8270C	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	3550B	8270C SIM	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	Gen Prep	9045M	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	METHOD	300.0	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	METHOD	314.0	III
17-Dec-2010	DUP08-SA5B-QC-121710	6169016	FD	METHOD	7471A	III
17-Dec-2010	DUP08-SA5B-QC-121710MSD	P169016M240518A	MSD	3550B	8151A	III
17-Dec-2010	DUP08-SA5B-QC-121710MS	P169016R240450A	MS	3550B	8151A	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3050B	6010B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3050B	6020	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3060A	7199	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3546	1625C	III

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Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3550B	8015B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3550B	8015M	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3550B	8082	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3550B	8270C	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	3550B	8270C SIM	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	5035	8015M	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	5035	8260B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	5035	8260B SIM	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	8330	8330A	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	Gen Prep	9045M	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	300.0	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	314.0	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	7471A	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	8015B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	8015M	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	8315A	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0	6169028	N	METHOD	9012B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0DUP	P169028D271852A	DUP	METHOD	9012B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0DUP	P169028D272100B	DUP	METHOD	300.0	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0DUP	P169028D272143B	DUP	METHOD	314.0	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0MS	P169028R271853A	MS	METHOD	9012B	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0MS	P169028R272114B	MS	METHOD	300.0	III
17-Dec-2010	SL-026-SA5B-SB-4.0-5.0MS	P169028R272206B	MS	METHOD	314.0	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3050B	6010B	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3050B	6020	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	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
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3546	1625C	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3550B	8015B	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3550B	8015M	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3550B	8082	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3550B	8270C	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	3550B	8270C SIM	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	5035	8015M	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	5035	8260B	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	5035	8260B SIM	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	8330	8330A	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	Gen Prep	9045M	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	300.0	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	314.0	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	7471A	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	8015B	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	8015M	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	8315A	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10	6169029	N	METHOD	9012B	III
17-Dec-2010	SL-026-SA5B-SB-9.0-10DUP	P169029D291740A	DUP	Gen Prep	9045M	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3050B	6010B	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3050B	6020	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3060A	7199	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3550B	8081A	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3550B	8082	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3550B	8151A	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	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
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	3550B	8270C SIM	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	Gen Prep	9045M	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	METHOD	300.0	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	N	METHOD	314.0	III
17-Dec-2010	SED-006-SIV-SD-0.0-0.5	6169021	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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	1.1	J	0.94	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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	6.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q
Nitrate-NO3	1.1	J	0.90	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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	4.2		0.87	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
Nitrate-NO3	1.2	J	0.96	MDL	1.8	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *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	0.91	MDL	1.7	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
Nitrate-NO3	1.2	J	0.88	MDL	1.6	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Nitrate-NO3	1.2	J	0.88	MDL	1.6	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: DUP08-SA5B-QC-121710 ***Collected:*** 12/17/2010 2:07:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.08	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	4.80	J	0.897	MDL	5.34	PQL	mg/Kg	J	Z

Sample ID: SED-001-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 12:41:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	110	J	41.6	MDL	112	PQL	mg/Kg	J	Z
TIN	2.27	J	1.12	MDL	11.2	PQL	mg/Kg	U	B
Zirconium	4.21	J	0.937	MDL	5.58	PQL	mg/Kg	J	Z

Sample ID: SED-004-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 11:42:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.30	J	1.24	MDL	12.4	PQL	mg/Kg	U	B

Sample ID: SED-006-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 3:25:00 ***Analysis Type:*** REA2 ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	113	J	44.8	MDL	120	PQL	mg/Kg	J	Z
TIN	2.79	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

Sample ID: SED-012-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 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
SODIUM	78.1	J	39.6	MDL	106	PQL	mg/Kg	J	Z
TIN	2.05	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	1.57	J	0.892	MDL	5.31	PQL	mg/Kg	J	Z

Sample ID: SED-014-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 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
SODIUM	101	J	43.4	MDL	116	PQL	mg/Kg	J	Z
TIN	2.99	J	1.16	MDL	11.6	PQL	mg/Kg	U	B
Zirconium	2.40	J	0.978	MDL	5.82	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: DE045 Laboratory: LL

EDD Filename: PrepDE045_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
TIN	2.43	J	1.11	MDL	11.1	PQL	mg/Kg	U	B
Zirconium	5.01	J	0.936	MDL	5.57	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 3:19:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.31	J	0.943	MDL	5.30	PQL	mg/Kg	J	Z
TIN	2.36	J	1.06	MDL	10.6	PQL	mg/Kg	U	B
Zirconium	2.87	J	0.890	MDL	5.30	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
TIN	2.56	J	1.18	MDL	11.8	PQL	mg/Kg	U	B

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.56	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.12	J	0.959	MDL	5.71	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SODIUM	59.8	J	40.0	MDL	107	PQL	mg/Kg	J	Z
TIN	1.98	J	1.07	MDL	10.7	PQL	mg/Kg	U	B
Zirconium	2.33	J	0.901	MDL	5.36	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* REA3 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.55	J	0.955	MDL	5.36	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.08	J	0.937	MDL	5.27	PQL	mg/Kg	J	Z
SODIUM	83.3	J	39.3	MDL	105	PQL	mg/Kg	J	Z
TIN	2.05	J	1.05	MDL	10.5	PQL	mg/Kg	U	B
Zirconium	2.99	J	0.885	MDL	5.27	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	11.8		0.0659	MDL	0.440	PQL	mg/Kg	J	Q
CADMIUM	1.70		0.0396	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	47.2		0.132	MDL	0.440	PQL	mg/Kg	J	Q
COBALT	8.63		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	39.6		0.0725	MDL	0.440	PQL	mg/Kg	J	Q
LEAD	21.6		0.0114	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	23.4		0.110	MDL	0.440	PQL	mg/Kg	J	Q, A
VANADIUM	59.1		0.0242	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.266	J	0.0440	MDL	0.440	PQL	mg/Kg	J	Z

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.31		0.0550	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *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	0.0663	MDL	0.221	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: DE045 Laboratory: LL

EDD Filename: PrepDE045_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ARSENIC	7.32		0.0663	MDL	0.442	PQL	mg/Kg	J	Q
CADMIUM	0.457		0.0398	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	26.7		0.133	MDL	0.442	PQL	mg/Kg	J	Q
COBALT	7.38		0.0221	MDL	0.110	PQL	mg/Kg	J	A
COPPER	13.2		0.0729	MDL	0.442	PQL	mg/Kg	J	Q
LEAD	15.3		0.0115	MDL	0.221	PQL	mg/Kg	J	Q
NICKEL	16.0		0.110	MDL	0.442	PQL	mg/Kg	J	Q, A
SILVER	0.0983	J	0.0133	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	48.4		0.0243	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.230	J	0.0442	MDL	0.442	PQL	mg/Kg	J	Z

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.05		0.0552	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.113	J	0.0721	MDL	0.240	PQL	mg/Kg	J	Z, Q
ARSENIC	8.81		0.0721	MDL	0.481	PQL	mg/Kg	J	Q
CADMIUM	0.371		0.0433	MDL	0.120	PQL	mg/Kg	J	Q
CHROMIUM	43.6		0.144	MDL	0.481	PQL	mg/Kg	J	Q
COBALT	11.6		0.0240	MDL	0.120	PQL	mg/Kg	J	A
COPPER	17.8		0.0793	MDL	0.481	PQL	mg/Kg	J	Q
LEAD	12.9		0.0125	MDL	0.240	PQL	mg/Kg	J	Q
NICKEL	21.8		0.120	MDL	0.481	PQL	mg/Kg	J	Q, A
SILVER	0.0368	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
VANADIUM	83.9		0.0264	MDL	0.120	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE045 Laboratory: LL

EDD Filename: PrepDE045_v1 eQAPP Name: CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.614		0.0601	MDL	0.120	PQL	mg/Kg	J	Q

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 3:25:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.174	J	0.0734	MDL	0.245	PQL	mg/Kg	J	Z, Q
ARSENIC	7.45		0.0734	MDL	0.490	PQL	mg/Kg	J	Q
CADMIUM	0.752		0.0441	MDL	0.122	PQL	mg/Kg	J	Q
CHROMIUM	38.0		0.147	MDL	0.490	PQL	mg/Kg	J	Q
COBALT	10.3		0.0245	MDL	0.122	PQL	mg/Kg	J	A
COPPER	17.7		0.0808	MDL	0.490	PQL	mg/Kg	J	Q
LEAD	31.1		0.0127	MDL	0.245	PQL	mg/Kg	J	Q
NICKEL	21.8		0.122	MDL	0.490	PQL	mg/Kg	J	Q, A
SILVER	0.0845	J	0.0147	MDL	0.122	PQL	mg/Kg	J	Z
VANADIUM	68.9		0.0269	MDL	0.122	PQL	mg/Kg	J	Q

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 3:25:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.193	J	0.0490	MDL	0.490	PQL	mg/Kg	J	Z

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 3:25:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.893		0.0612	MDL	0.122	PQL	mg/Kg	J	Q

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 10:24:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.100	J	0.0607	MDL	0.202	PQL	mg/Kg	J	Z, Q
ARSENIC	5.73		0.0607	MDL	0.404	PQL	mg/Kg	J	Q
CADMIUM	0.157		0.0364	MDL	0.101	PQL	mg/Kg	J	Q
CHROMIUM	15.3		0.121	MDL	0.404	PQL	mg/Kg	J	Q
COBALT	4.48		0.0202	MDL	0.101	PQL	mg/Kg	J	A
COPPER	7.46		0.0667	MDL	0.404	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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 10:24:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	9.90		0.0105	MDL	0.202	PQL	mg/Kg	J	Q
NICKEL	9.76		0.101	MDL	0.404	PQL	mg/Kg	J	Q, A
SILVER	0.0246	J	0.0121	MDL	0.101	PQL	mg/Kg	J	Z
VANADIUM	32.1		0.0222	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 10:24:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.172	J	0.0404	MDL	0.404	PQL	mg/Kg	J	Z

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 10:24:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.478		0.0506	MDL	0.101	PQL	mg/Kg	J	Q

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
ANTIMONY	0.101	J	0.0692	MDL	0.231	PQL	mg/Kg	J	Z, Q
ARSENIC	5.93		0.0692	MDL	0.461	PQL	mg/Kg	J	Q
CADMIUM	0.279		0.0415	MDL	0.115	PQL	mg/Kg	J	Q
CHROMIUM	22.9		0.138	MDL	0.461	PQL	mg/Kg	J	Q
COBALT	8.83		0.0231	MDL	0.115	PQL	mg/Kg	J	A
COPPER	10.8		0.0761	MDL	0.461	PQL	mg/Kg	J	Q
LEAD	12.2		0.0120	MDL	0.231	PQL	mg/Kg	J	Q
NICKEL	14.4		0.115	MDL	0.461	PQL	mg/Kg	J	Q, A
SILVER	0.0350	J	0.0138	MDL	0.115	PQL	mg/Kg	J	Z
VANADIUM	47.2		0.0254	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 8:44:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.239	J	0.0461	MDL	0.461	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 8:44:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	1.09		0.0577	MDL	0.115	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
ANTIMONY	0.137	J	0.0668	MDL	0.223	PQL	mg/Kg	J	Z, Q
ARSENIC	8.38		0.0668	MDL	0.445	PQL	mg/Kg	J	Q
CADMIUM	0.211		0.0401	MDL	0.111	PQL	mg/Kg	J	Q
CHROMIUM	39.6		0.134	MDL	0.445	PQL	mg/Kg	J	Q
COBALT	9.07		0.0223	MDL	0.111	PQL	mg/Kg	J	A
COPPER	15.0		0.0735	MDL	0.445	PQL	mg/Kg	J	Q
LEAD	10.5		0.0116	MDL	0.223	PQL	mg/Kg	J	Q
NICKEL	21.8		0.111	MDL	0.445	PQL	mg/Kg	J	Q, A
SILVER	0.0298	J	0.0134	MDL	0.111	PQL	mg/Kg	J	Z
VANADIUM	72.6		0.0245	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 3:08:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.115	J	0.0445	MDL	0.445	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 3:08:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.482		0.0557	MDL	0.111	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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
ANTIMONY	0.0835	J	0.0636	MDL	0.212	PQL	mg/Kg	J	Z, Q
ARSENIC	7.37		0.0636	MDL	0.424	PQL	mg/Kg	J	Q
CADMIUM	0.0665	J	0.0382	MDL	0.106	PQL	mg/Kg	J	Z, Q
CHROMIUM	27.9		0.127	MDL	0.424	PQL	mg/Kg	J	Q
COBALT	6.61		0.0212	MDL	0.106	PQL	mg/Kg	J	A
COPPER	10.8		0.0700	MDL	0.424	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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
LEAD	8.34		0.0110	MDL	0.212	PQL	mg/Kg	J	Q
NICKEL	14.6		0.106	MDL	0.424	PQL	mg/Kg	J	Q, A
SILVER	0.0313	J	0.0127	MDL	0.106	PQL	mg/Kg	J	Z
VANADIUM	49.0		0.0233	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 3:19:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.0900	J	0.0424	MDL	0.424	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 3:19:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.407		0.0530	MDL	0.106	PQL	mg/Kg	J	Q

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
ANTIMONY	0.172	J	0.0710	MDL	0.237	PQL	mg/Kg	J	Z, Q
ARSENIC	9.29		0.0710	MDL	0.473	PQL	mg/Kg	J	Q
CADMIUM	0.304		0.0426	MDL	0.118	PQL	mg/Kg	J	Q
CHROMIUM	47.4		0.142	MDL	0.473	PQL	mg/Kg	J	Q
COBALT	11.1		0.0237	MDL	0.118	PQL	mg/Kg	J	A
COPPER	20.1		0.0781	MDL	0.473	PQL	mg/Kg	J	Q
LEAD	13.7		0.0123	MDL	0.237	PQL	mg/Kg	J	Q
NICKEL	23.4		0.118	MDL	0.473	PQL	mg/Kg	J	Q, A
SILVER	0.0599	J	0.0142	MDL	0.118	PQL	mg/Kg	J	Z
VANADIUM	79.5		0.0260	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 12:30:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.197	J	0.0473	MDL	0.473	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 12:30:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.552		0.0591	MDL	0.118	PQL	mg/Kg	J	Q

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0766	J	0.0659	MDL	0.220	PQL	mg/Kg	J	Z, Q
ARSENIC	6.74		0.0659	MDL	0.439	PQL	mg/Kg	J	Q
CADMIUM	0.116		0.0395	MDL	0.110	PQL	mg/Kg	J	Q
CHROMIUM	27.0		0.132	MDL	0.439	PQL	mg/Kg	J	Q
COBALT	7.60		0.0220	MDL	0.110	PQL	mg/Kg	J	A
COPPER	9.54		0.0724	MDL	0.439	PQL	mg/Kg	J	Q
LEAD	8.13		0.0114	MDL	0.220	PQL	mg/Kg	J	Q
NICKEL	15.4		0.110	MDL	0.439	PQL	mg/Kg	J	Q, A
SILVER	0.0637	J	0.0132	MDL	0.110	PQL	mg/Kg	J	Z
VANADIUM	51.8		0.0241	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.171	J	0.0439	MDL	0.439	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.819		0.0549	MDL	0.110	PQL	mg/Kg	J	Q

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0644	U	0.0644	MDL	0.215	PQL	mg/Kg	UJ	Q
ARSENIC	3.87		0.0644	MDL	0.429	PQL	mg/Kg	J	Q
CADMIUM	0.188		0.0386	MDL	0.107	PQL	mg/Kg	J	Q
CHROMIUM	19.8		0.129	MDL	0.429	PQL	mg/Kg	J	Q
COBALT	6.01		0.0215	MDL	0.107	PQL	mg/Kg	J	A
COPPER	9.66		0.0708	MDL	0.429	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LEAD	5.93		0.0112	MDL	0.215	PQL	mg/Kg	J	Q
NICKEL	12.7		0.107	MDL	0.429	PQL	mg/Kg	J	Q, A
SILVER	0.0388	J	0.0129	MDL	0.107	PQL	mg/Kg	J	Z
VANADIUM	38.9		0.0236	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.127	J	0.0429	MDL	0.429	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.664		0.0536	MDL	0.107	PQL	mg/Kg	J	Q

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* REA4 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.105	J	0.0632	MDL	0.211	PQL	mg/Kg	J	Z, Q
ARSENIC	4.22		0.0632	MDL	0.421	PQL	mg/Kg	J	Q
CADMIUM	0.229		0.0379	MDL	0.105	PQL	mg/Kg	J	Q
CHROMIUM	21.0		0.126	MDL	0.421	PQL	mg/Kg	J	Q
COBALT	6.15		0.0211	MDL	0.105	PQL	mg/Kg	J	A
COPPER	10.4		0.0695	MDL	0.421	PQL	mg/Kg	J	Q
LEAD	5.86		0.0110	MDL	0.211	PQL	mg/Kg	J	Q
NICKEL	13.3		0.105	MDL	0.421	PQL	mg/Kg	J	Q, A
SILVER	0.0361	J	0.0126	MDL	0.105	PQL	mg/Kg	J	Z
VANADIUM	39.3		0.0232	MDL	0.105	PQL	mg/Kg	J	Q

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* REA5 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.135	J	0.0421	MDL	0.421	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* REA6 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.748		0.0527	MDL	0.105	PQL	mg/Kg	J	Q

Method Category: METALS **Method:** 7199 **Matrix:** AQ

Sample ID: EB01-SIV-121710 *Collected:* 12/17/2010 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
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

Sample ID: EB05-SA5B-121710 *Collected:* 12/17/2010 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
HEXAVALENT CHROMIUM	5.0	U	5.0	MDL	10.0	PQL	ug/L	UJ	H

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

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *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	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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	0.35	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 7199 **Matrix:** SO

Sample ID: SED-012-SIV-SD-0.0-0.5 **Collected:** 12/17/2010 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	0.56	J	0.21	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SED-014-SIV-SD-0.0-0.5 **Collected:** 12/17/2010 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	0.32	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-4.0-5.0 **Collected:** 12/17/2010 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	0.40	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 **Collected:** 12/17/2010 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	0.32	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-4.0-5.0 **Collected:** 12/17/2010 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	0.59	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-8.0-9.0 **Collected:** 12/17/2010 12:37:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.65	J	0.23	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-4.0-5.0 **Collected:** 12/17/2010 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
HEXAVALENT CHROMIUM	0.44	J	0.22	MDL	1.1	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-7.0-8.0 **Collected:** 12/17/2010 10:28:00 **Analysis Type:** RES **Dilution:** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.57	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

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

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

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0498	J	0.0031	MDL	0.107	PQL	mg/Kg	J	Z

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0343	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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	0.0233	J	0.0034	MDL	0.120	PQL	mg/Kg	J	Z

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
MERCURY	0.0078	J	0.0029	MDL	0.101	PQL	mg/Kg	J	Z

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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	0.0209	J	0.0032	MDL	0.111	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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	0.0092	J	0.0033	MDL	0.115	PQL	mg/Kg	J	Z

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *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	0.0032	MDL	0.113	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 1625C **Matrix: SO**

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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
N-NITROSODIMETHYLAMINE	19.3	J	18.2	MDL	36.4	PQL	ng/Kg	J	Z

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
N-NITROSODIMETHYLAMINE	27.7	J	19.0	MDL	38.1	PQL	ng/Kg	J	Z

Method Category: SVOA

Method: 8015M **Matrix: SO**

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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 (C15-C20)	1.1	J	0.45	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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
DIETHYLENE GLYCOL	5.5	U	5.5	MDL	14	PQL	mg/Kg	UJ	S
ETHYLENE GLYCOL	6.6	U	6.6	MDL	14	PQL	mg/Kg	UJ	S
Propylene glycol	8.7	U	8.7	MDL	14	PQL	mg/Kg	UJ	S

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 3:19:00 *Analysis Type:* REA2 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
EFH (C21-C30)	1.2	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z
EFH (C30-C40)	1.1	J	0.44	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *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)	1.0	J	0.44	MDL	1.3	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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *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	0.074	J	0.041	MDL	0.19	PQL	ug/Kg	J	Z

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
4,4'-DDE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
4,4'-DDT	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ALDRIN	0.082	U	0.082	MDL	0.21	PQL	ug/Kg	R	S
ALPHA-BHC	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	R	S
BETA-BHC	0.074	U	0.074	MDL	0.21	PQL	ug/Kg	R	S
Chlordane	0.99	U	0.99	MDL	4.2	PQL	ug/Kg	R	S
DELTA-BHC	0.045	U	0.045	MDL	0.21	PQL	ug/Kg	R	S
DIELDRIN	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ENDOSULFAN I	0.054	U	0.054	MDL	0.21	PQL	ug/Kg	R	S
ENDOSULFAN II	0.14	U	0.14	MDL	0.42	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ENDRIN	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
ENDRIN KETONE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR	0.074	U	0.074	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	R	S
METHOXYCHLOR	0.42	U	0.42	MDL	2.1	PQL	ug/Kg	R	S
MIREX	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	R	S
TOXAPHENE	2.7	U	2.7	MDL	8.2	PQL	ug/Kg	R	S

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
4,4'-DDD	1.3	U	1.3	MDL	1.3	PQL	ug/Kg	UJ	S
4,4'-DDE	1.0	U	1.0	MDL	1.0	PQL	ug/Kg	UJ	S
4,4'-DDT	1.2	U	1.2	MDL	1.2	PQL	ug/Kg	UJ	S
ALDRIN	0.082	U	0.082	MDL	0.21	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.080	U	0.080	MDL	0.21	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8081A **Matrix:** SO

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
BETA-BHC	0.075	U	0.075	MDL	0.21	PQL	ug/Kg	UJ	S
Chlordane	4.1	U	4.1	MDL	4.2	PQL	ug/Kg	UJ	S
DELTA-BHC	0.14	J	0.045	MDL	0.21	PQL	ug/Kg	J	Z, S
DIELDRIN	0.50	U	0.50	MDL	0.50	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.43	U	0.43	MDL	0.43	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.31	U	0.31	MDL	0.42	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.11	U	0.11	MDL	0.42	PQL	ug/Kg	UJ	S
ENDRIN	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.36	U	0.36	MDL	0.42	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.075	U	0.075	MDL	0.21	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.072	U	0.072	MDL	0.21	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.42	U	0.42	MDL	2.1	PQL	ug/Kg	UJ	S
MIREX	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
TOXAPHENE	2.7	U	2.7	MDL	8.2	PQL	ug/Kg	UJ	S

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
4,4'-DDD	0.35	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z
DIELDRIN	0.12	J	0.070	MDL	0.36	PQL	ug/Kg	J	Z

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
DELTA-BHC	0.11	J	0.042	MDL	0.20	PQL	ug/Kg	J	Z

Method Category: SVOA

Method: 8082 **Matrix:** AQ

Sample ID: EB01-SIV-121710 *Collected:* 12/17/2010 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
Aroclor 5432	0.10	U	0.10	MDL	0.51	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA **Method:** 8082 **Matrix:** AQ

Sample ID: EB01-SIV-121710 *Collected:* 12/17/2010 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
Aroclor 5442	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	L
Aroclor 5460	0.10	U	0.10	MDL	0.51	PQL	ug/L	UJ	L

Sample ID: EB05-SA5B-121710 *Collected:* 12/17/2010 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
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: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *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	11		1.1	MDL	3.7	PQL	ug/Kg	J	L

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *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	43		0.75	MDL	3.9	PQL	ug/Kg	J	S
AROCLOR 1260	18		0.75	MDL	3.9	PQL	ug/Kg	J	S
Aroclor 5432	2.3	U	2.3	MDL	7.5	PQL	ug/Kg	UJ	L
Aroclor 5442	2.3	U	2.3	MDL	7.5	PQL	ug/Kg	UJ	L
Aroclor 5460	8.2		2.3	MDL	7.5	PQL	ug/Kg	J	S, L

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	1.2	U	1.2	MDL	4.1	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	4.1	PQL	ug/Kg	UJ	L
Aroclor 5460	1.2	U	1.2	MDL	4.1	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

Lab Reporting Batch ID: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8082 **Matrix:** SO

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
Aroclor 5432	1.2	U	1.2	MDL	4.1	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	4.1	PQL	ug/Kg	UJ	L
Aroclor 5460	7.6		1.2	MDL	4.1	PQL	ug/Kg	J	L

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
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: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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	1.9	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
Aroclor 5432	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5442	1.2	U	1.2	MDL	3.9	PQL	ug/Kg	UJ	L
Aroclor 5460	4.8		1.2	MDL	3.9	PQL	ug/Kg	J	L

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
AROCLOR 1254	0.49	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-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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
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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
AROCLOR 1254	0.52	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

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.71	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-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* RES *Dilution:* 50

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
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	55	U	55	MDL	180	PQL	ug/Kg	UJ	L

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
AROCLOR 1254	0.62	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

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *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

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *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	0.91	U	0.91	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SED-004-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 11:42:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DINOSEB	0.99	U	0.99	MDL	3.0	PQL	ug/Kg	R	L

Sample ID: SED-006-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
DICAMBA	0.78	J	0.50	MDL	1.5	PQL	ug/Kg	J	Z
DICHLOROPROP	2.0	J	1.0	MDL	2.1	PQL	ug/Kg	J	Z
DINOSEB	1.0	U	1.0	MDL	3.0	PQL	ug/Kg	R	L

Sample ID: SED-012-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
DICAMBA	0.77	J	0.42	MDL	1.3	PQL	ug/Kg	J	Z
DINOSEB	0.85	U	0.85	MDL	2.5	PQL	ug/Kg	R	L
MCPP	240	J	80	MDL	270	PQL	ug/Kg	J	Z

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
DINOSEB	0.94	U	0.94	MDL	2.8	PQL	ug/Kg	R	L

Method Category: SVOA

Method: 8270C **Matrix: AQ**

Sample ID: EB01-SIV-121710 *Collected:* 12/17/2010 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DICHLOROBENZENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
1,4-DICHLOROBENZENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** AQ

Sample ID: EB01-SIV-121710 *Collected:* 12/17/2010 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	E
BENZIDINE	20	U	20	MDL	59	PQL	ug/L	UJ	E
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E
HEXACHLOROCYCLOPENTADIENE	5	U	5	MDL	15	PQL	ug/L	UJ	E

Sample ID: EB05-SA5B-121710 *Collected:* 12/17/2010 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1,3-DICHLOROBENZENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
1,4-DICHLOROBENZENE	1	U	1	MDL	5	PQL	ug/L	UJ	L
4-CHLOROANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	E
ANILINE	1	U	1	MDL	5	PQL	ug/L	UJ	E
BENZIDINE	20	U	20	MDL	60	PQL	ug/L	UJ	E
BENZOIC ACID	6	U	6	MDL	15	PQL	ug/L	UJ	E
HEXACHLOROCYCLOPENTADIENE	5	U	5	MDL	15	PQL	ug/L	UJ	E

Method Category: SVOA

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

Sample ID: EB01-SIV-121710 *Collected:* 12/17/2010 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
BENZO(G,H,I)PERYLENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	0.29	J	0.052	MDL	1.0	PQL	ug/L	U	B
DIBENZO(A,H)ANTHRACENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
Diethylphthalate	0.054	J	0.052	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.23	J	0.052	MDL	1.0	PQL	ug/L	U	B
INDENO(1,2,3-CD)PYRENE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
NAPHTHALENE	0.051	J	0.010	MDL	0.052	PQL	ug/L	J	Z, L
N-NITROSODIMETHYLAMINE	0.010	U	0.010	MDL	0.052	PQL	ug/L	UJ	L
PHENANTHRENE	0.010	U	0.010	MDL	0.052	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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: EB05-SA5B-121710 *Collected:* 12/17/2010 12:35:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-METHYLNAPHTHALENE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L
BENZO(G,H,I)PERYLENE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L
BIS(2-ETHYLHEXYL)PHTHALATE	0.33	J	0.051	MDL	1.0	PQL	ug/L	U	B
DIBENZO(A,H)ANTHRACENE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L
Diethylphthalate	0.11	J	0.051	MDL	1.0	PQL	ug/L	J	Z
Di-n-butylphthalate	0.50	J	0.051	MDL	1.0	PQL	ug/L	U	B
INDENO(1,2,3-CD)PYRENE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L
NAPHTHALENE	0.029	J	0.010	MDL	0.051	PQL	ug/L	J	Z, L
N-NITROSODIMETHYLAMINE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L
PHENANTHRENE	0.010	U	0.010	MDL	0.051	PQL	ug/L	UJ	L

Method Category: SVOA

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

Sample ID: DUP08-SA5B-QC-121710 *Collected:* 12/17/2010 2:07:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	0.94	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
BIS(2-ETHYLHEXYL)PHTHALATE	14	J	6.7	MDL	20	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.6	J	6.7	MDL	20	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	1.3	J	0.75	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SED-001-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 12:41:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
1-METHYLNAPHTHALENE	1.8	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
ANTHRACENE	0.63	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	0.96	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.77	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Butylbenzylphthalate	7.1	J	6.8	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: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

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

Sample ID: SED-004-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 11:42:00 ***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	8.2	J	7.4	MDL	22	PQL	ug/Kg	J	Z

Sample ID: SED-006-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 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
ACENAPHTHYLENE	0.55	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
ANTHRACENE	0.83	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.5	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.7	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.2	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.7	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z
Butylbenzylphthalate	13	J	7.5	MDL	22	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.0	J	0.83	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SED-012-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 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
BENZO(A)ANTHRACENE	0.95	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.0	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.82	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.89	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	13	J	6.4	MDL	19	PQL	ug/Kg	J	Z
Butylbenzylphthalate	12	J	6.4	MDL	19	PQL	ug/Kg	J	Z
CHRYSENE	1.5	J	0.35	MDL	1.8	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.71	MDL	1.8	PQL	ug/Kg	J	Z

Sample ID: SED-014-SIV-SD-0.0-0.5 ***Collected:*** 12/17/2010 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(A)ANTHRACENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.2	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	18	J	7.1	MDL	21	PQL	ug/Kg	J	Z
Butylbenzylphthalate	11	J	7.1	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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SED-014-SIV-SD-0.0-0.5 *Collected:* 12/17/2010 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
CHRYSENE	1.9	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z
FLUORENE	1.9	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	0.91	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	0.98	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.78	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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	11	J	6.7	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	6.9	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	12	J	7.2	MDL	22	PQL	ug/Kg	J	Z
Di-n-butylphthalate	8.1	J	7.2	MDL	22	PQL	ug/Kg	J	Z
NAPHTHALENE	0.84	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTHRACENE	1.1	J	0.36	MDL	1.8	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.4	J	0.73	MDL	1.8	PQL	ug/Kg	J	Z
BIS(2-ETHYLHEXYL)PHTHALATE	7.2	J	6.6	MDL	20	PQL	ug/Kg	J	Z

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *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	7.6	J	6.6	MDL	20	PQL	ug/Kg	J	Z
Di-n-octylphthalate	14	J	6.6	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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: VOA

Method: 8015B **Matrix: SO**

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 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	240	J	110	MDL	560	PQL	ug/Kg	J	Z

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 3:19:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	220	J	110	MDL	550	PQL	ug/Kg	J	Z

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 12:30:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	550	J	120	MDL	600	PQL	ug/Kg	J	Z

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* REA4 *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHANOL	330	J	110	MDL	550	PQL	ug/Kg	J	Z

Method Category: VOA

Method: 8260B **Matrix: SO**

Sample ID: SL-026-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 3:08:00 *Analysis Type:* RES *Dilution:* 1.04

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
METHYLENE CHLORIDE	0.93	J	0.28	MDL	4.7	PQL	ug/Kg	U	B
TOLUENE	0.15	J	0.09	MDL	4.7	PQL	ug/Kg	U	B

Sample ID: SL-026-SA5B-SB-9.0-10 *Collected:* 12/17/2010 3:19:00 *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	0.62	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

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE045 **Laboratory:** LL

EDD Filename: PrepDE045_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: VOA

Method: 8260B **Matrix:** SO

Sample ID: SL-281-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 12:30:00 *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	0.73	J	0.27	MDL	4.5	PQL	ug/Kg	U	B
TOLUENE	0.11	J	0.09	MDL	4.5	PQL	ug/Kg	U	B

Sample ID: SL-281-SA5B-SB-8.0-9.0 *Collected:* 12/17/2010 12:37:00 *Analysis Type:* RES *Dilution:* 1.01

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	7.4	J	1.4	MDL	9.3	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.81	J	0.28	MDL	4.6	PQL	ug/Kg	U	B
TOLUENE	0.16	J	0.09	MDL	4.6	PQL	ug/Kg	U	B

Sample ID: SL-282-SA5B-SB-4.0-5.0 *Collected:* 12/17/2010 10:20:00 *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	0.96	J	0.24	MDL	4.1	PQL	ug/Kg	U	B
TOLUENE	0.13	J	0.08	MDL	4.1	PQL	ug/Kg	U	B

Sample ID: SL-282-SA5B-SB-7.0-8.0 *Collected:* 12/17/2010 10:28:00 *Analysis Type:* RES *Dilution:* 0.91

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2-BUTANONE (MEK)	5.8	J	1.2	MDL	7.9	PQL	ug/Kg	J	Z
METHYLENE CHLORIDE	0.85	J	0.24	MDL	4.0	PQL	ug/Kg	U	B
TOLUENE	0.12	J	0.08	MDL	4.0	PQL	ug/Kg	U	B

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_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: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_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

DE045

QC Outlier Report: HoldingTimes

Lab Reporting Batch ID: DE045 **Laboratory: LL**
EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

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

Sample ID	*Type*	*Actual*	*Criteria*	*Units*	*Flag*
EB01-SIV-121710 (RES)	Sampling To Analysis	25.00	24.00	HOURS	J (all detects)
EB05-SA5B-121710 (RES)		25.00	24.00	HOURS	UJ (all non-detects)

Method Blank Outlier Report

Lab Reporting Batch ID: DE045 | Laboratory: LL

EDD Filename: DE045_v1 | eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35548CB221648	12/23/2010 4:48:00 PM	MAGNESIUM	0.0421 mg/L	EB01-SIV-121710 EB05-SA5B-121710
P35548CB222358	12/22/2010 11:58:00 PM	CALCIUM	0.0960 mg/L	EB01-SIV-121710 EB05-SA5B-121710

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35708EB221714	12/30/2010 5:14:00 PM	ALUMINUM CALCIUM IRON PHOSPHORUS STRONTIUM TIN	16.5 mg/Kg 13.9 mg/Kg 6.65 mg/Kg 1.41 mg/Kg 0.0782 mg/Kg 1.13 mg/Kg	DUP08-SA5B-QC-121710 SED-001-SIV-SD-0.0-0.5 SED-004-SIV-SD-0.0-0.5 SED-006-SIV-SD-0.0-0.5 SED-012-SIV-SD-0.0-0.5 SED-014-SIV-SD-0.0-0.5 SL-026-SA5B-SB-4.0-5.0 SL-026-SA5B-SB-9.0-10 SL-281-SA5B-SB-4.0-5.0 SL-281-SA5B-SB-8.0-9.0 SL-282-SA5B-SB-4.0-5.0 SL-282-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
DUP08-SA5B-QC-121710(REA2)	TIN	3.08 mg/Kg	3.08U mg/Kg
SED-001-SIV-SD-0.0-0.5(REA2)	TIN	2.27 mg/Kg	2.27U mg/Kg
SED-004-SIV-SD-0.0-0.5(REA2)	TIN	2.30 mg/Kg	2.30U mg/Kg
SED-006-SIV-SD-0.0-0.5(REA2)	TIN	2.79 mg/Kg	2.79U mg/Kg
SED-012-SIV-SD-0.0-0.5(REA2)	TIN	2.05 mg/Kg	2.05U mg/Kg
SED-014-SIV-SD-0.0-0.5(REA2)	TIN	2.99 mg/Kg	2.99U mg/Kg
SL-026-SA5B-SB-4.0-5.0(REA2)	TIN	2.43 mg/Kg	2.43U mg/Kg
SL-026-SA5B-SB-9.0-10(REA2)	TIN	2.36 mg/Kg	2.36U mg/Kg
SL-281-SA5B-SB-4.0-5.0(REA2)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-281-SA5B-SB-8.0-9.0(REA2)	TIN	2.56 mg/Kg	2.56U mg/Kg
SL-282-SA5B-SB-4.0-5.0(REA2)	TIN	1.98 mg/Kg	1.98U mg/Kg
SL-282-SA5B-SB-7.0-8.0(REA2)	TIN	2.05 mg/Kg	2.05U mg/Kg

Method Blank Outlier Report

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35726BB220955A	1/3/2011 9:55:00 AM	COPPER	0.203 mg/Kg	DUP08-SA5B-QC-121710
		LEAD	0.0114 mg/Kg	SED-001-SIV-SD-0.0-0.5
		NICKEL	0.121 mg/Kg	SED-004-SIV-SD-0.0-0.5
		ZINC	0.601 mg/Kg	SED-006-SIV-SD-0.0-0.5
				SED-012-SIV-SD-0.0-0.5
				SED-014-SIV-SD-0.0-0.5
				SL-026-SA5B-SB-4.0-5.0
				SL-026-SA5B-SB-9.0-10
				SL-281-SA5B-SB-4.0-5.0
				SL-281-SA5B-SB-8.0-9.0
				SL-282-SA5B-SB-4.0-5.0
				SL-282-SA5B-SB-7.0-8.0

Method: 8260B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
VBLKB22B212231A	12/20/2010 10:31:00 PM	METHYLENE CHLORIDE	0.50 ug/Kg	SL-026-SA5B-SB-4.0-5.0
		TOLUENE	0.11 ug/Kg	SL-026-SA5B-SB-9.0-10
				SL-281-SA5B-SB-4.0-5.0
				SL-281-SA5B-SB-8.0-9.0
				SL-282-SA5B-SB-4.0-5.0
				SL-282-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-026-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.93 ug/Kg	4.7U ug/Kg
SL-026-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.15 ug/Kg	4.7U ug/Kg
SL-026-SA5B-SB-9.0-10(RES)	METHYLENE CHLORIDE	0.62 ug/Kg	3.9U ug/Kg
SL-026-SA5B-SB-9.0-10(RES)	TOLUENE	0.08 ug/Kg	3.9U ug/Kg
SL-281-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.73 ug/Kg	4.5U ug/Kg
SL-281-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.11 ug/Kg	4.5U ug/Kg
SL-281-SA5B-SB-8.0-9.0(RES)	METHYLENE CHLORIDE	0.81 ug/Kg	4.6U ug/Kg
SL-281-SA5B-SB-8.0-9.0(RES)	TOLUENE	0.16 ug/Kg	4.6U ug/Kg
SL-282-SA5B-SB-4.0-5.0(RES)	METHYLENE CHLORIDE	0.96 ug/Kg	4.1U ug/Kg
SL-282-SA5B-SB-4.0-5.0(RES)	TOLUENE	0.13 ug/Kg	4.1U ug/Kg
SL-282-SA5B-SB-7.0-8.0(RES)	METHYLENE CHLORIDE	0.85 ug/Kg	4.0U ug/Kg
SL-282-SA5B-SB-7.0-8.0(RES)	TOLUENE	0.12 ug/Kg	4.0U ug/Kg

Method: 8270C SIM
Matrix: AQ

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
PLKWI35B260727	1/5/2011 7:27:00 AM	BIS(2-ETHYLHEXYL)PHTHALATE	0.19 ug/L	EB01-SIV-121710
		Butylbenzylphthalate	0.099 ug/L	EB05-SA5B-121710
		Di-n-butylphthalate	0.16 ug/L	
		Di-n-octylphthalate	0.18 ug/L	

Method Blank Outlier Report

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_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
EB01-SIV-121710(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.29 ug/L	1.0U ug/L
EB01-SIV-121710(RES)	Di-n-butylphthalate	0.23 ug/L	1.0U ug/L
EB05-SA5B-121710(RES)	BIS(2-ETHYLHEXYL)PHTHALATE	0.33 ug/L	1.0U ug/L
EB05-SA5B-121710(RES)	Di-n-butylphthalate	0.50 ug/L	1.0U ug/L

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_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-026-SA5B-SB-4.0-5.0MS (SL-026-SA5B-SB-4.0-5.0 SL-026-SA5B-SB-9.0-10)	FLUORIDE	64	-	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
DUP08-SA5B-QC-121710MS	DICAMBA	145	-	33.00-120.00	-	DICAMBA	J(all detects)
DUP08-SA5B-QC-121710MSD (DUP08-SA5B-QC-121710)	DICHLOROPROP	187	158	55.00-141.00	-	DICHLOROPROP	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03552AQ240840A P03552AY240822A (EB01-SIV-121710 EB05-SA5B-121710)	Aroclor 5442	44	44	75.00-125.00	-	Aroclor 5432, 5442, 5460	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
P4WILCSQ260758 P4WILCSY260830 (EB01-SIV-121710 EB05-SA5B-121710)	2-METHYLNAPHTHALENE	69	67	75.00-115.00	-	2-METHYLNAPHTHALENE	J(all detects) UJ(all non-detects)
	BENZO(G,H,I)PERYLENE	62	-	68.00-125.00	-	BENZO(G,H,I)PERYLENE	
	DIBENZO(A,H)ANTHRACENE	60	65	71.00-125.00	-	DIBENZO(A,H)ANTHRACENE	
	INDENO(1,2,3-CD)PYRENE	60	66	69.00-124.00	-	INDENO(1,2,3-CD)PYRENE	
	NAPHTHALENE	-	71	72.00-109.00	-	NAPHTHALENE	
	N-NITROSODIMETHYLAMINE	54	53	70.00-130.00	-	N-NITROSODIMETHYLAMINE	
	PHENANTHRENE	72	73	76.00-111.00	-	PHENANTHRENE	

Method: 8270C
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P4WMLCSQ260623 P4WMLCSY260649 (EB01-SIV-121710 EB05-SA5B-121710)	1,3-DICHLOROBENZENE	62	-	63.00-110.00	-	1,3-DICHLOROBENZENE	J(all detects) UJ(all non-detects)
	1,4-DICHLOROBENZENE	64	-	65.00-113.00	-	1,4-DICHLOROBENZENE	
	4-CHLOROANILINE	-	-	42.00-124.00	40 (30.00)	4-CHLOROANILINE	
	ANILINE	-	-	49.00-101.00	39 (30.00)	ANILINE	
	BENZIDINE	-	-	20.00-109.00	44 (30.00)	BENZIDINE	
	BENZOIC ACID	-	-	10.00-69.00	67 (30.00)	BENZOIC ACID	
	HEXACHLOROCYCLOPENTADI	-	-	10.00-118.00	40 (30.00)	HEXACHLOROCYCLOPENTAD	

Method: 8260B
Matrix: AQ

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
LCSY53Q211359A LCSY53Y211420A (TB-121710)	1,2-DIBROMO-3-CHLOROPROP	124	-	66.00-120.00	-	1,2-DIBROMO-3-CHLOROPRO	J(all detects)
	2-BUTANONE (MEK)	157	152	66.00-151.00	-	2-BUTANONE (MEK)	
	2-HEXANONE	146	143	65.00-136.00	-	2-HEXANONE	

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_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
P03613AQ240200A P03613AY240141A (DUP08 -SA5B -QC-121710 SED -001-SIV-SD-0.0-0.5 SED -004-SIV-SD-0.0-0.5 SED -006-SIV-SD-0.0-0.5 SED -012-SIV-SD-0.0-0.5 SED -014-SIV-SD-0.0-0.5 SL -026-SA5B -SB-4.0-5.0 SL -026-SA5B -SB-9.0-10 SL -281-SA5B -SB-4.0-5.0 SL -281-SA5B -SB-8.0-9.0 SL -282-SA5B -SB-4.0-5.0 SL -282-SA5B -SB-7.0-8.0)	Aroclor 5442	68	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
P03623AQ240355A (DUP08 -SA5B -QC-121710 SED -001-SIV-SD-0.0-0.5 SED -004-SIV-SD-0.0-0.5 SED -006-SIV-SD-0.0-0.5 SED -012-SIV-SD-0.0-0.5 SED -014-SIV-SD-0.0-0.5)	DINOSEB	6	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P35726BQ220958A (DUP08 -SA5B -QC-121710 SED -001-SIV-SD-0.0-0.5 SED -004-SIV-SD-0.0-0.5 SED -006-SIV-SD-0.0-0.5 SED -012-SIV-SD-0.0-0.5 SED -014-SIV-SD-0.0-0.5 SL -026-SA5B -SB-4.0-5.0 SL -026-SA5B -SB-9.0-10 SL -281-SA5B -SB-4.0-5.0 SL -281-SA5B -SB-8.0-9.0 SL -282-SA5B -SB-4.0-5.0 SL -282-SA5B -SB-7.0-8.0)	ANTIMONY	63	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: PrepDE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015M
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SL-026-SA5B-SB-9.0-10	TETRAMETHYLENE GLYCOL	27	29.00-137.00	All Target Analytes	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP08-SA5B-QC-121710	DECACHLOROBIPHENYL	227	20.00-120.00	All Target Analytes	No Qual Diluted Out
SED-004-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SED-004-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	11	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SED-006-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	47	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-001-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	150	45.00-120.00	All Target Analytes	J(all detects)
SED-012-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	136	45.00-120.00	All Target Analytes	J(all detects)
SL-026-SA5B-SB-9.0-10	DECACHLOROBIPHENYL	126	45.00-120.00	All Target Analytes	J(all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM

Matrix: AQ

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
EB01-SIV-121710	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.29	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.054	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.23	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.051	0.052	PQL	ug/L	
EB05-SA5B-121710	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.33	1.0	PQL	ug/L	J (all detects)
	Diethylphthalate	J	0.11	1.0	PQL	ug/L	
	Di-n-butylphthalate	J	0.50	1.0	PQL	ug/L	
	NAPHTHALENE	J	0.029	0.051	PQL	ug/L	

Method: 1625C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5B-SB-9.0-10	N-NITROSODIMETHYLAMINE	J	19.3	36.4	PQL	ng/Kg	J (all detects)
SL-281-SA5B-SB-8.0-9.0	N-NITROSODIMETHYLAMINE	J	27.7	38.1	PQL	ng/Kg	J (all detects)

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-014-SIV-SD-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SL-026-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.1	1.7	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.8	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-8.0-9.0	Nitrate-NO3	J	1.4	1.7	PQL	mg/Kg	J (all detects)
SL-282-SA5B-SB-4.0-5.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)
SL-282-SA5B-SB-7.0-8.0	Nitrate-NO3	J	1.2	1.6	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5B-QC-121710	TIN	J	3.08	10.7	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.80	5.34	PQL	mg/Kg	
SED-001-SIV-SD-0.0-0.5	SODIUM	J	110	112	PQL	mg/Kg	J (all detects)
	TIN	J	2.27	11.2	PQL	mg/Kg	
	Zirconium	J	4.21	5.58	PQL	mg/Kg	
SED-004-SIV-SD-0.0-0.5	TIN	J	2.30	12.4	PQL	mg/Kg	J (all detects)
SED-006-SIV-SD-0.0-0.5	SODIUM	J	113	120	PQL	mg/Kg	J (all detects)
	TIN	J	2.79	12.0	PQL	mg/Kg	
SED-012-SIV-SD-0.0-0.5	SODIUM	J	78.1	106	PQL	mg/Kg	J (all detects)
	TIN	J	2.05	10.6	PQL	mg/Kg	
	Zirconium	J	1.57	5.31	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-014-SIV-SD-0.0-0.5	SODIUM	J	101	116	PQL	mg/Kg	J (all detects)
	TIN	J	2.99	11.6	PQL	mg/Kg	
	Zirconium	J	2.40	5.82	PQL	mg/Kg	
SL-026-SA5B-SB-4.0-5.0	TIN	J	2.43	11.1	PQL	mg/Kg	J (all detects)
	Zirconium	J	5.01	5.57	PQL	mg/Kg	
SL-026-SA5B-SB-9.0-10	BORON	J	4.31	5.30	PQL	mg/Kg	J (all detects)
	TIN	J	2.36	10.6	PQL	mg/Kg	
	Zirconium	J	2.87	5.30	PQL	mg/Kg	
SL-281-SA5B-SB-4.0-5.0	TIN	J	2.56	11.8	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-8.0-9.0	TIN	J	2.56	11.4	PQL	mg/Kg	J (all detects)
	Zirconium	J	4.12	5.71	PQL	mg/Kg	
SL-282-SA5B-SB-4.0-5.0	BORON	J	4.55	5.36	PQL	mg/Kg	J (all detects)
	SODIUM	J	59.8	107	PQL	mg/Kg	
	TIN	J	1.98	10.7	PQL	mg/Kg	
	Zirconium	J	2.33	5.36	PQL	mg/Kg	
SL-282-SA5B-SB-7.0-8.0	BORON	J	5.08	5.27	PQL	mg/Kg	J (all detects)
	SODIUM	J	83.3	105	PQL	mg/Kg	
	TIN	J	2.05	10.5	PQL	mg/Kg	
	Zirconium	J	2.99	5.27	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5B-QC-121710	ANTIMONY	J	0.113	0.220	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.266	0.440	PQL	mg/Kg	
SED-001-SIV-SD-0.0-0.5	ANTIMONY	J	0.118	0.221	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.230	0.442	PQL	mg/Kg	
	SILVER	J	0.0983	0.110	PQL	mg/Kg	
SED-004-SIV-SD-0.0-0.5	ANTIMONY	J	0.113	0.240	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0368	0.120	PQL	mg/Kg	
SED-006-SIV-SD-0.0-0.5	ANTIMONY	J	0.174	0.245	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.193	0.490	PQL	mg/Kg	
	SILVER	J	0.0845	0.122	PQL	mg/Kg	
SED-012-SIV-SD-0.0-0.5	ANTIMONY	J	0.100	0.202	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.172	0.404	PQL	mg/Kg	
	SILVER	J	0.0246	0.101	PQL	mg/Kg	
SED-014-SIV-SD-0.0-0.5	ANTIMONY	J	0.101	0.231	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.239	0.461	PQL	mg/Kg	
	SILVER	J	0.0350	0.115	PQL	mg/Kg	
SL-026-SA5B-SB-4.0-5.0	ANTIMONY	J	0.137	0.223	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.115	0.445	PQL	mg/Kg	
	SILVER	J	0.0298	0.111	PQL	mg/Kg	
SL-026-SA5B-SB-9.0-10	ANTIMONY	J	0.0835	0.212	PQL	mg/Kg	J (all detects)
	CADMIUM	J	0.0665	0.106	PQL	mg/Kg	
	SELENIUM	J	0.0900	0.424	PQL	mg/Kg	
	SILVER	J	0.0313	0.106	PQL	mg/Kg	
SL-281-SA5B-SB-4.0-5.0	ANTIMONY	J	0.172	0.237	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.197	0.473	PQL	mg/Kg	
	SILVER	J	0.0599	0.118	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-281-SA5B-SB-8.0-9.0	ANTIMONY	J	0.0766	0.220	PQL	mg/Kg	
	SELENIUM	J	0.171	0.439	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0637	0.110	PQL	mg/Kg	
SL-282-SA5B-SB-4.0-5.0	SELENIUM	J	0.127	0.429	PQL	mg/Kg	
	SILVER	J	0.0388	0.107	PQL	mg/Kg	J (all detects)
SL-282-SA5B-SB-7.0-8.0	ANTIMONY	J	0.105	0.211	PQL	mg/Kg	
	SELENIUM	J	0.135	0.421	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0361	0.105	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5B-QC-121710	HEXAVALENT CHROMIUM	J	0.59	1.1	PQL	mg/Kg	J (all detects)
SED-004-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.37	1.2	PQL	mg/Kg	J (all detects)
SED-006-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.35	1.2	PQL	mg/Kg	J (all detects)
SED-012-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.56	1.1	PQL	mg/Kg	J (all detects)
SED-014-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.32	1.2	PQL	mg/Kg	J (all detects)
SL-026-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.40	1.1	PQL	mg/Kg	J (all detects)
SL-026-SA5B-SB-9.0-10	HEXAVALENT CHROMIUM	J	0.32	1.1	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.59	1.2	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-8.0-9.0	HEXAVALENT CHROMIUM	J	0.65	1.1	PQL	mg/Kg	J (all detects)
SL-282-SA5B-SB-4.0-5.0	HEXAVALENT CHROMIUM	J	0.44	1.1	PQL	mg/Kg	J (all detects)
SL-282-SA5B-SB-7.0-8.0	HEXAVALENT CHROMIUM	J	0.57	1.1	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5B-QC-121710	MERCURY	J	0.0498	0.107	PQL	mg/Kg	J (all detects)
SED-004-SIV-SD-0.0-0.5	MERCURY	J	0.0343	0.114	PQL	mg/Kg	J (all detects)
SED-006-SIV-SD-0.0-0.5	MERCURY	J	0.0233	0.120	PQL	mg/Kg	J (all detects)
SED-012-SIV-SD-0.0-0.5	MERCURY	J	0.0078	0.101	PQL	mg/Kg	J (all detects)
SED-014-SIV-SD-0.0-0.5	MERCURY	J	0.0209	0.111	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-4.0-5.0	MERCURY	J	0.0092	0.115	PQL	mg/Kg	J (all detects)
SL-281-SA5B-SB-8.0-9.0	MERCURY	J	0.0034	0.113	PQL	mg/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8015B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5B-SB-4.0-5.0	METHANOL	J	240	560	PQL	ug/Kg	J (all detects)
SL-026-SA5B-SB-9.0-10	METHANOL	J	220	550	PQL	ug/Kg	J (all detects)
SL-281-SA5B-SB-4.0-5.0	METHANOL	J	550	600	PQL	ug/Kg	J (all detects)
SL-282-SA5B-SB-7.0-8.0	METHANOL	J	330	550	PQL	ug/Kg	J (all detects)

Method: 8015M

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5B-SB-4.0-5.0	EFH (C15-C20)	J	1.1	1.3	PQL	mg/Kg	J (all detects)
SL-026-SA5B-SB-9.0-10	EFH (C21-C30) EFH (C30-C40)	J J	1.2 1.1	1.3 1.3	PQL PQL	mg/Kg mg/Kg	J (all detects)
SL-282-SA5B-SB-7.0-8.0	EFH (C30-C40)	J	1.0	1.3	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-001-SIV-SD-0.0-0.5	DELTA-BHC	J	0.074	0.19	PQL	ug/Kg	J (all detects)
SED-006-SIV-SD-0.0-0.5	DELTA-BHC	J	0.14	0.21	PQL	ug/Kg	J (all detects)
SED-012-SIV-SD-0.0-0.5	4,4'-DDD DIELDRIN	J J	0.35 0.12	0.36 0.36	PQL PQL	ug/Kg ug/Kg	J (all detects)
SED-014-SIV-SD-0.0-0.5	DELTA-BHC	J	0.11	0.20	PQL	ug/Kg	J (all detects)

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-014-SIV-SD-0.0-0.5	AROCLOR 1260	J	1.9	2.0	PQL	ug/Kg	J (all detects)
SL-026-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.49	1.9	PQL	ug/Kg	J (all detects)
SL-281-SA5B-SB-4.0-5.0	AROCLOR 1254	J	0.52	2.0	PQL	ug/Kg	J (all detects)
SL-281-SA5B-SB-8.0-9.0	AROCLOR 1254	J	0.71	1.9	PQL	ug/Kg	J (all detects)
SL-282-SA5B-SB-7.0-8.0	AROCLOR 1254	J	0.62	1.9	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-006-SIV-SD-0.0-0.5	DICAMBA	J	0.78	1.5	PQL	ug/Kg	J (all detects)
	DICHLOROPROP	J	2.0	2.1	PQL	ug/Kg	
SED-012-SIV-SD-0.0-0.5	DICAMBA	J	0.77	1.3	PQL	ug/Kg	J (all detects)
	MCPP	J	240	270	PQL	ug/Kg	

Method: 8260B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SL-026-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.93	4.7	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.15	4.7	PQL	ug/Kg	
SL-026-SA5B-SB-9.0-10	METHYLENE CHLORIDE	J	0.62	3.9	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.08	3.9	PQL	ug/Kg	
SL-281-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.73	4.5	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.11	4.5	PQL	ug/Kg	
SL-281-SA5B-SB-8.0-9.0	2-BUTANONE (MEK)	J	7.4	9.3	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.81	4.6	PQL	ug/Kg	
	TOLUENE	J	0.16	4.6	PQL	ug/Kg	
SL-282-SA5B-SB-4.0-5.0	METHYLENE CHLORIDE	J	0.96	4.1	PQL	ug/Kg	J (all detects)
	TOLUENE	J	0.13	4.1	PQL	ug/Kg	
SL-282-SA5B-SB-7.0-8.0	2-BUTANONE (MEK)	J	5.8	7.9	PQL	ug/Kg	J (all detects)
	METHYLENE CHLORIDE	J	0.85	4.0	PQL	ug/Kg	
	TOLUENE	J	0.12	4.0	PQL	ug/Kg	

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP08-SA5B-QC-121710	1-METHYLNAPHTHALENE	J	0.94	1.9	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.82	1.9	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	14	20	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.6	20	PQL	ug/Kg	
	DIBENZO(A,H)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
SED-001-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	1.8	1.9	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.63	1.9	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	0.96	1.9	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.77	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	Butylbenzylphthalate	J	7.1	20	PQL	ug/Kg	
SED-004-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	8.2	22	PQL	ug/Kg	J (all detects)
SED-006-SIV-SD-0.0-0.5	ACENAPHTHYLENE	J	0.55	2.1	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	0.83	2.1	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.5	2.1	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.7	2.1	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.2	2.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.7	2.1	PQL	ug/Kg	
	Butylbenzylphthalate	J	13	22	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.0	2.1	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE045 **Laboratory: LL**

EDD Filename: DE045_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SED-012-SIV-SD-0.0-0.5	BENZO(A)ANTHRACENE	J	0.95	1.8	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.0	1.8	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	0.82	1.8	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.89	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	13	19	PQL	ug/Kg	
	Butylbenzylphthalate	J	12	19	PQL	ug/Kg	
	CHRYSENE	J	1.5	1.8	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	1.8	PQL	ug/Kg	
SED-014-SIV-SD-0.0-0.5	BENZO(A)ANTHRACENE	J	1.2	2.0	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.2	2.0	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	1.0	2.0	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	2.0	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	18	21	PQL	ug/Kg	
	Butylbenzylphthalate	J	11	21	PQL	ug/Kg	
	CHRYSENE	J	1.9	2.0	PQL	ug/Kg	
	FLUORENE	J	1.9	2.0	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	0.91	2.0	PQL	ug/Kg	
	NAPHTHALENE	J	0.98	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	
SL-026-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	11	20	PQL	ug/Kg	J (all detects)
SL-026-SA5B-SB-9.0-10	BIS(2-ETHYLHEXYL)PHTHALATE	J	6.9	20	PQL	ug/Kg	J (all detects)
SL-281-SA5B-SB-4.0-5.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	12	22	PQL	ug/Kg	J (all detects)
	Di-n-butylphthalate	J	8.1	22	PQL	ug/Kg	
	NAPHTHALENE	J	0.84	2.0	PQL	ug/Kg	
SL-282-SA5B-SB-4.0-5.0	ANTHRACENE	J	1.1	1.8	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	1.4	1.8	PQL	ug/Kg	
	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.2	20	PQL	ug/Kg	
SL-282-SA5B-SB-7.0-8.0	BIS(2-ETHYLHEXYL)PHTHALATE	J	7.6	20	PQL	ug/Kg	J (all detects)
	Di-n-octylphthalate	J	14	20	PQL	ug/Kg	

LDC #: 25550D4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/6/11
SDG #: DE045 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: GR
2nd Reviewer: V

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	CCB hits but no data qualified (see SDG: DE050)
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~~) or Dup (
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	SW	See SDG: DE050
XII.	Sample Result Verification	N	
XIII.	Overall Assessment of Data	N	
XIV.	Field Duplicates	—	
XV	Field Blanks	ND	EB=2,3

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	DUP08-SA5B-QC-121710	11	SL-281-SA5B-SB-4.0-5.0	21		31	
2	EB05-SA5B-121710	12	SL-281-SA5B-SB-8.0-9.0	22		32	
3	EB01-SIV-121710	13	SL-026-SA5B-SB-4.0-5.0	23		33	
4	SED-014-SIV-SD-0.0-0.5	14	SL-026-SA5B-SB-9.0-10	24		34	
5	SED-012-SIV-SD-0.0-0.5	15		25		35	
6	SED-006-SIV-SD-0.0-0.5	16		26		36	
7	SED-001-SIV-SD-0.0-0.5	17		27		37	
8	SED-004-SIV-SD-0.0-0.5	18		28		38	
9	SL-282-SA5B-SB-4.0-5.0	19		29		39	
10	SL-282-SA5B-SB-7.0-8.0	20		30		40	

Notes: _____

LDC #: 25550A4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer:

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
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

		Analysis Method
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

SAMPLE DELIVERY GROUP

DE046

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-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3050B	6010B	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3050B	6020	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3060A	7199	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3550B	8081A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3550B	8082	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3550B	8151A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3550B	8270C	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	3550B	8270C SIM	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	Gen Prep	9045M	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	METHOD	300.0	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	METHOD	314.0	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5	6172038	N	METHOD	7471A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3050B	6010B	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3050B	6020	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3060A	7199	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3550B	8081A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3550B	8082	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3550B	8151A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3550B	8270C	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	3550B	8270C SIM	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	METHOD	300.0	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	METHOD	314.0	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MS	6172039	MS	METHOD	7471A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3050B	6010B	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3050B	6020	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3550B	8081A	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
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3550B	8082	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3550B	8151A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3550B	8270C	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	3550B	8270C SIM	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5MSD	6172040	MSD	METHOD	7471A	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	3050B	6010B	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	3050B	6020	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	3060A	7199	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	Gen Prep	9045M	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	METHOD	300.0	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	METHOD	314.0	IV
20-Dec-2010	SED-005-SIV-SD-0.0-0.5DUP	6172041	DUP	METHOD	7471A	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3050B	6010B	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3050B	6020	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3060A	7199	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3550B	8081A	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3550B	8082	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3550B	8151A	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3550B	8270C	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	3550B	8270C SIM	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	Gen Prep	9045M	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	METHOD	300.0	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	METHOD	314.0	IV
20-Dec-2010	DUP01-SIV-QC-122010	6172036	FD	METHOD	7471A	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3050B	6010B	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	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
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3060A	7199	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3550B	8081A	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3550B	8082	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3550B	8151A	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3550B	8270C	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	3550B	8270C SIM	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	Gen Prep	9045M	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	METHOD	300.0	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	METHOD	314.0	IV
20-Dec-2010	SED-003-SIV-SD-0.0-0.5	6172037	N	METHOD	7471A	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3050B	6010B	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3050B	6020	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3060A	7199	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3550B	8081A	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3550B	8082	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3550B	8151A	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3550B	8270C	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	3550B	8270C SIM	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	Gen Prep	9045M	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	METHOD	300.0	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	METHOD	314.0	IV
20-Dec-2010	SED-008-SIV-SD-0.0-0.5	6172043	N	METHOD	7471A	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3050B	6010B	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3050B	6020	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3060A	7199	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3550B	8081A	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
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3550B	8082	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3550B	8151A	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3550B	8270C	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	3550B	8270C SIM	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	Gen Prep	9045M	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	METHOD	300.0	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	METHOD	314.0	IV
20-Dec-2010	SED-007-SIV-SD-0.0-0.6	6172042	N	METHOD	7471A	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3050B	6010B	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3050B	6020	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3060A	7199	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3550B	8081A	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3550B	8082	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3550B	8151A	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3550B	8270C	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	3550B	8270C SIM	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	Gen Prep	9045M	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	METHOD	300.0	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	METHOD	314.0	IV
20-Dec-2010	SED-037-SIV-SD-0.0-0.5	6172045	N	METHOD	7471A	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3050B	6010B	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3050B	6020	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3060A	7199	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3550B	8081A	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3550B	8082	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	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
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3550B	8270C	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	3550B	8270C SIM	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	Gen Prep	9045M	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	METHOD	300.0	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	N	METHOD	314.0	IV
20-Dec-2010	SED-034-SIV-SD-0.0-0.5	6172044	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: DE046 **Laboratory:** LL

EDD Filename: PrepDE046_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: GENCHEM

Method: 300.0 **Matrix:** SO

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *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		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *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		1.1	MDL	1.4	PQL	mg/Kg	J	Q

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
FLUORIDE	2.6		0.99	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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	1.9		0.97	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	2.7		1.2	MDL	1.5	PQL	mg/Kg	J	Q

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
FLUORIDE	2.0		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	2.4		1.1	MDL	1.4	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 314.0 **Matrix: SO**

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
PERCHLORATE	29.4	J	13.4	MDL	44.6	PQL	ug/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.20	J	1.21	MDL	12.1	PQL	mg/Kg	U	B

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.00	J	1.08	MDL	6.07	PQL	mg/Kg	J	Z
LITHIUM	22.7		0.27	MDL	2.4	PQL	mg/Kg	J	A
SODIUM	75.0	J	45.3	MDL	121	PQL	mg/Kg	J	Z
STRONTIUM	16.2		0.0753	MDL	0.607	PQL	mg/Kg	J	A
Zirconium	1.20	J	1.02	MDL	6.07	PQL	mg/Kg	J	Z, FD

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.28	J	1.29	MDL	12.9	PQL	mg/Kg	U	B

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.57	J	1.15	MDL	6.44	PQL	mg/Kg	J	Z
LITHIUM	20.3		0.28	MDL	2.6	PQL	mg/Kg	J	A
SODIUM	99.8	J	48.1	MDL	129	PQL	mg/Kg	J	Z
STRONTIUM	14.6		0.0799	MDL	0.644	PQL	mg/Kg	J	A
Zirconium	1.21	J	1.08	MDL	6.44	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.32	J	1.20	MDL	12.0	PQL	mg/Kg	U	B

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
BORON	4.11	J	1.07	MDL	6.00	PQL	mg/Kg	J	Z
LITHIUM	22.6		0.26	MDL	2.4	PQL	mg/Kg	J	A
SODIUM	75.7	J	44.8	MDL	120	PQL	mg/Kg	J	Z
STRONTIUM	15.8		0.0744	MDL	0.600	PQL	mg/Kg	J	A
Zirconium	1.01	U	1.01	MDL	6.00	PQL	mg/Kg	UJ	FD

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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
TIN	2.36	J	1.18	MDL	11.8	PQL	mg/Kg	U	B

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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
LITHIUM	18.2		0.26	MDL	2.4	PQL	mg/Kg	J	A
SODIUM	69.5	J	44.1	MDL	118	PQL	mg/Kg	J	Z
STRONTIUM	24.3		0.0732	MDL	0.591	PQL	mg/Kg	J	A
Zirconium	1.02	J	0.992	MDL	5.91	PQL	mg/Kg	J	Z

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 10:39:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.87	J	1.42	MDL	14.2	PQL	mg/Kg	U	B

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
BORON	6.76	J	1.26	MDL	7.08	PQL	mg/Kg	J	Z
LITHIUM	23.9		0.31	MDL	2.8	PQL	mg/Kg	J	A
SODIUM	82.4	J	52.8	MDL	142	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
STRONTIUM	19.3		0.0877	MDL	0.708	PQL	mg/Kg	J	A
Zirconium	1.44	J	1.19	MDL	7.08	PQL	mg/Kg	J	Z

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 3:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	2.65	J	1.26	MDL	12.6	PQL	mg/Kg	U	B

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
BORON	5.57	J	1.12	MDL	6.30	PQL	mg/Kg	J	Z
LITHIUM	22.6		0.28	MDL	2.5	PQL	mg/Kg	J	A
SODIUM	56.6	J	47.0	MDL	126	PQL	mg/Kg	J	Z
STRONTIUM	8.22		0.0781	MDL	0.630	PQL	mg/Kg	J	A

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* REA *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
TIN	3.42	J	1.37	MDL	13.7	PQL	mg/Kg	U	B

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
LITHIUM	20.8		0.30	MDL	2.7	PQL	mg/Kg	J	A
SODIUM	121	J	51.1	MDL	137	PQL	mg/Kg	J	Z
STRONTIUM	27.0		0.0849	MDL	0.685	PQL	mg/Kg	J	A
Zirconium	1.54	J	1.15	MDL	6.85	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.183	J	0.0495	MDL	0.495	PQL	mg/Kg	J	Z

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.747		0.0619	MDL	0.124	PQL	mg/Kg	J	Q, E

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* REA3 *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: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.134	J	0.0743	MDL	0.248	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.30		0.0743	MDL	0.495	PQL	mg/Kg	J	Q, E
CADMIUM	0.267		0.0446	MDL	0.124	PQL	mg/Kg	J	Q
CHROMIUM	21.4		0.149	MDL	0.495	PQL	mg/Kg	J	E
COBALT	6.69		0.0248	MDL	0.124	PQL	mg/Kg	J	E
COPPER	10.4		0.0817	MDL	0.495	PQL	mg/Kg	J	E
LEAD	18.4		0.0129	MDL	0.248	PQL	mg/Kg	J	E, A
NICKEL	16.3		0.124	MDL	0.495	PQL	mg/Kg	J	Q, E, A
SILVER	0.0727	J	0.0149	MDL	0.124	PQL	mg/Kg	J	Z
THALLIUM	0.366		0.0371	MDL	0.124	PQL	mg/Kg	J	Q
VANADIUM	40.6		0.0272	MDL	0.124	PQL	mg/Kg	J	Q, E, A
ZINC	86.4		0.693	MDL	3.71	PQL	mg/Kg	J	E, A

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *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	0.0531	MDL	0.531	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.396		0.0663	MDL	0.133	PQL	mg/Kg	J	Q, E

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	101		0.143	MDL	0.531	PQL	mg/Kg	J	E, A

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *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	0.0796	MDL	0.265	PQL	mg/Kg	UJ	Q, B
ARSENIC	8.91		0.0796	MDL	0.531	PQL	mg/Kg	J	Q, E
CADMIUM	0.164		0.0478	MDL	0.133	PQL	mg/Kg	J	Q
CHROMIUM	17.3		0.159	MDL	0.531	PQL	mg/Kg	J	E
COBALT	6.47		0.0265	MDL	0.133	PQL	mg/Kg	J	E
COPPER	8.40		0.0876	MDL	0.531	PQL	mg/Kg	J	E
LEAD	11.0		0.0138	MDL	0.265	PQL	mg/Kg	J	E, A
NICKEL	11.2		0.133	MDL	0.531	PQL	mg/Kg	J	Q, E, A
SILVER	0.0333	J	0.0159	MDL	0.133	PQL	mg/Kg	J	Z
THALLIUM	0.291		0.0398	MDL	0.133	PQL	mg/Kg	J	Q
VANADIUM	36.5		0.0292	MDL	0.133	PQL	mg/Kg	J	Q, E, A
ZINC	71.6		0.743	MDL	3.98	PQL	mg/Kg	J	E, A

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.199	J	0.0480	MDL	0.480	PQL	mg/Kg	J	Z

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.819		0.0600	MDL	0.120	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	113		0.130	MDL	0.480	PQL	mg/Kg	J	E, A

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.166	J	0.0720	MDL	0.240	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.63		0.0720	MDL	0.480	PQL	mg/Kg	J	Q, E
CADMIUM	0.224		0.0432	MDL	0.120	PQL	mg/Kg	J	Q
CHROMIUM	25.3		0.144	MDL	0.480	PQL	mg/Kg	J	E
COBALT	6.97		0.0240	MDL	0.120	PQL	mg/Kg	J	E
COPPER	11.0		0.0792	MDL	0.480	PQL	mg/Kg	J	E
LEAD	16.5		0.0125	MDL	0.240	PQL	mg/Kg	J	E, A
NICKEL	17.6		0.120	MDL	0.480	PQL	mg/Kg	J	Q, E, A
SILVER	0.0489	J	0.0144	MDL	0.120	PQL	mg/Kg	J	Z
THALLIUM	0.358		0.0360	MDL	0.120	PQL	mg/Kg	J	Q
VANADIUM	43.7		0.0264	MDL	0.120	PQL	mg/Kg	J	Q, E, A
ZINC	82.4		0.672	MDL	3.60	PQL	mg/Kg	J	E, A

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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
SELENIUM	0.168	J	0.0468	MDL	0.468	PQL	mg/Kg	J	Z

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 1:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.495		0.0585	MDL	0.117	PQL	mg/Kg	J	Q, E

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 1:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	96.6		0.126	MDL	0.468	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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	0.145	J	0.0702	MDL	0.234	PQL	mg/Kg	UJ	Q, B
ARSENIC	4.12		0.0702	MDL	0.468	PQL	mg/Kg	J	Q, E
CADMIUM	0.305		0.0421	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	16.5		0.140	MDL	0.468	PQL	mg/Kg	J	E
COBALT	5.12		0.0234	MDL	0.117	PQL	mg/Kg	J	E
COPPER	10.8		0.0772	MDL	0.468	PQL	mg/Kg	J	E
LEAD	11.7		0.0122	MDL	0.234	PQL	mg/Kg	J	E, A
NICKEL	12.8		0.117	MDL	0.468	PQL	mg/Kg	J	Q, E, A
SILVER	0.0542	J	0.0140	MDL	0.117	PQL	mg/Kg	J	Z
THALLIUM	0.234		0.0351	MDL	0.117	PQL	mg/Kg	J	Q
VANADIUM	32.3		0.0257	MDL	0.117	PQL	mg/Kg	J	Q, E, A
ZINC	111		0.655	MDL	3.51	PQL	mg/Kg	J	E, A

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	0.199	J	0.0594	MDL	0.594	PQL	mg/Kg	J	Z

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 10:39:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.508		0.0743	MDL	0.149	PQL	mg/Kg	J	Q, E

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 10:39:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	89.9		0.160	MDL	0.594	PQL	mg/Kg	J	E, A

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	0.109	J	0.0892	MDL	0.297	PQL	mg/Kg	UJ	Q, B
ARSENIC	12.9		0.0892	MDL	0.594	PQL	mg/Kg	J	Q, E
CADMIUM	0.238		0.0535	MDL	0.149	PQL	mg/Kg	J	Q
CHROMIUM	16.3		0.178	MDL	0.594	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
COBALT	5.85		0.0297	MDL	0.149	PQL	mg/Kg	J	E
COPPER	10.2		0.0981	MDL	0.594	PQL	mg/Kg	J	E
LEAD	16.9		0.0155	MDL	0.297	PQL	mg/Kg	J	E, A
NICKEL	12.3		0.149	MDL	0.594	PQL	mg/Kg	J	Q, E, A
SILVER	0.0811	J	0.0178	MDL	0.149	PQL	mg/Kg	J	Z
THALLIUM	0.268		0.0446	MDL	0.149	PQL	mg/Kg	J	Q
VANADIUM	31.2		0.0327	MDL	0.149	PQL	mg/Kg	J	Q, E, A
ZINC	67.9		0.832	MDL	4.46	PQL	mg/Kg	J	E, A

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	0.143	J	0.0494	MDL	0.494	PQL	mg/Kg	J	Z

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	0.357		0.0618	MDL	0.124	PQL	mg/Kg	J	Q, E

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	76.1		0.133	MDL	0.494	PQL	mg/Kg	J	E, A

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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	0.0742	U	0.0742	MDL	0.247	PQL	mg/Kg	UJ	Q
ARSENIC	5.30		0.0742	MDL	0.494	PQL	mg/Kg	J	Q, E
CADMIUM	0.167		0.0445	MDL	0.124	PQL	mg/Kg	J	Q
CHROMIUM	13.0		0.148	MDL	0.494	PQL	mg/Kg	J	E
COBALT	4.99		0.0247	MDL	0.124	PQL	mg/Kg	J	E
COPPER	6.53		0.0816	MDL	0.494	PQL	mg/Kg	J	E
LEAD	12.7		0.0129	MDL	0.247	PQL	mg/Kg	J	E, A
NICKEL	9.34		0.124	MDL	0.494	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

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

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

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
SILVER	0.0249	J	0.0148	MDL	0.124	PQL	mg/Kg	J	Z
THALLIUM	0.252		0.0371	MDL	0.124	PQL	mg/Kg	J	Q
VANADIUM	27.7		0.0272	MDL	0.124	PQL	mg/Kg	J	Q, E, A
ZINC	93.8		0.692	MDL	3.71	PQL	mg/Kg	J	E, A

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* REA *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.266	J	0.0532	MDL	0.532	PQL	mg/Kg	J	Z

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.676		0.0665	MDL	0.133	PQL	mg/Kg	J	Q, E

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BARIUM	124		0.144	MDL	0.532	PQL	mg/Kg	J	E, A

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.249	J	0.0798	MDL	0.266	PQL	mg/Kg	UJ	Q, B
ARSENIC	5.93		0.0798	MDL	0.532	PQL	mg/Kg	J	Q, E
CADMIUM	0.397		0.0479	MDL	0.133	PQL	mg/Kg	J	Q
CHROMIUM	23.8		0.160	MDL	0.532	PQL	mg/Kg	J	E
COBALT	7.03		0.0266	MDL	0.133	PQL	mg/Kg	J	E
COPPER	12.8		0.0878	MDL	0.532	PQL	mg/Kg	J	E
LEAD	49.0		0.0138	MDL	0.266	PQL	mg/Kg	J	E, A
NICKEL	18.6		0.133	MDL	0.532	PQL	mg/Kg	J	Q, E, A
SILVER	0.127	J	0.0160	MDL	0.133	PQL	mg/Kg	J	Z
THALLIUM	0.321		0.0399	MDL	0.133	PQL	mg/Kg	J	Q
VANADIUM	46.2		0.0293	MDL	0.133	PQL	mg/Kg	J	Q, E, A
ZINC	238		0.745	MDL	3.99	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

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

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.37	J	0.25	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
HEXAVALENT CHROMIUM	0.60	J	0.25	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
HEXAVALENT CHROMIUM	0.63	J	0.28	MDL	1.4	PQL	mg/Kg	J	Z

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

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0285	J	0.0036	MDL	0.125	PQL	mg/Kg	J	Z

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0761	J	0.0037	MDL	0.128	PQL	mg/Kg	J	Z

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
MERCURY	0.0309	J	0.0035	MDL	0.120	PQL	mg/Kg	J	Z

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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	0.0257	J	0.0033	MDL	0.114	PQL	mg/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
MERCURY	0.106	J	0.0043	MDL	0.148	PQL	mg/Kg	J	Z

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MERCURY	0.0210	J	0.0038	MDL	0.131	PQL	mg/Kg	J	Z

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *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	0.71		0.083	MDL	0.43	PQL	ug/Kg	J	FD
4,4'-DDT	0.86		0.083	MDL	0.43	PQL	ug/Kg	J	FD
ENDRIN ALDEHYDE	0.27	J	0.083	MDL	0.43	PQL	ug/Kg	J	Z, FD
HEPTACHLOR EPOXIDE	0.078	J	0.043	MDL	0.21	PQL	ug/Kg	J	Z, L, FD
MIREX	0.095	J	0.083	MDL	0.43	PQL	ug/Kg	J	Z, FD, *XIII

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *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	1.2		0.089	MDL	0.46	PQL	ug/Kg	J	S, * XIII
gamma-BHC (Lindane)	0.058	J	0.046	MDL	0.22	PQL	ug/Kg	J	Z, S, * XIII

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
4,4'-DDE	0.53	U	0.53	MDL	0.53	PQL	ug/Kg	UJ	S, FD
4,4'-DDT	0.83	U	0.83	MDL	0.83	PQL	ug/Kg	UJ	S, FD
ALDRIN	0.082	U	0.082	MDL	0.21	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	UJ	S
BETA-BHC	0.074	U	0.074	MDL	0.21	PQL	ug/Kg	UJ	S
Chlordane	3.3	U	3.3	MDL	4.2	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
DELTA-BHC	0.044	U	0.044	MDL	0.21	PQL	ug/Kg	UJ	S
DIELDRIN	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.054	U	0.054	MDL	0.21	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.15	U	0.15	MDL	0.42	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
ENDRIN	0.091	U	0.091	MDL	0.42	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.19	U	0.19	MDL	0.42	PQL	ug/Kg	UJ	S, FD
ENDRIN KETONE	0.082	U	0.082	MDL	0.42	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.042	U	0.042	MDL	0.21	PQL	ug/Kg	UJ	S
HEPTACHLOR	0.074	U	0.074	MDL	0.21	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.10	U	0.10	MDL	0.21	PQL	ug/Kg	UJ	S, FD
METHOXYCHLOR	0.42	U	0.42	MDL	2.1	PQL	ug/Kg	UJ	S
MIREX	0.10	U	0.10	MDL	0.42	PQL	ug/Kg	UJ	S, FD
TOXAPHENE	2.7	U	2.7	MDL	8.2	PQL	ug/Kg	UJ	S

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 1:30:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	3.8		0.40	MDL	2.1	PQL	ug/Kg	J	C, M

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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
gamma-BHC (Lindane)	0.060	J	0.041	MDL	0.20	PQL	ug/Kg	J	Z, * XIII
TOXAPHENE	2.7	U	2.7	MDL	8.0	PQL	ug/Kg	UJ	C

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 10:39:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDT	10		0.49	MDL	2.5	PQL	ug/Kg	J	C, M

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
4,4'-DDD	0.098	U	0.098	MDL	0.51	PQL	ug/Kg	R	S, 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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: Soil**

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
4,4'-DDE	2.8	U	2.8	MDL	2.8	PQL	ug/Kg	R	S
ALDRIN	0.098	U	0.098	MDL	0.25	PQL	ug/Kg	R	S
ALPHA-BHC	0.051	U	0.051	MDL	0.25	PQL	ug/Kg	R	S
BETA-BHC	0.089	U	0.089	MDL	0.25	PQL	ug/Kg	R	S
Chlordane	1.2	U	1.2	MDL	5.1	PQL	ug/Kg	R	S
DELTA-BHC	0.053	U	0.053	MDL	0.25	PQL	ug/Kg	R	S
DIELDRIN	0.64	U	0.64	MDL	0.64	PQL	ug/Kg	R	S
ENDOSULFAN I	0.065	U	0.065	MDL	0.25	PQL	ug/Kg	R	S
ENDOSULFAN II	0.79	U	0.79	MDL	0.79	PQL	ug/Kg	R	S
ENDOSULFAN SULFATE	0.098	U	0.098	MDL	0.51	PQL	ug/Kg	R	S
ENDRIN	0.98	U	0.98	MDL	0.98	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.46	U	0.46	MDL	0.51	PQL	ug/Kg	R	S
ENDRIN KETONE	0.098	U	0.098	MDL	0.51	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.051	U	0.051	MDL	0.25	PQL	ug/Kg	R	S
HEPTACHLOR	0.089	U	0.089	MDL	0.25	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.64	U	0.64	MDL	0.64	PQL	ug/Kg	R	S
METHOXYCHLOR	0.51	U	0.51	MDL	2.5	PQL	ug/Kg	R	S
MIREX	0.098	U	0.098	MDL	0.51	PQL	ug/Kg	R	S
TOXAPHENE	3.3	U	3.3	MDL	9.8	PQL	ug/Kg	R	S

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
4,4'-DDD	0.085	U	0.085	MDL	0.44	PQL	ug/Kg	R	S
4,4'-DDE	0.25	U	0.25	MDL	0.44	PQL	ug/Kg	R	S
4,4'-DDT	0.37	U	0.37	MDL	0.44	PQL	ug/Kg	R	S
ALDRIN	0.085	U	0.085	MDL	0.21	PQL	ug/Kg	R	S
ALPHA-BHC	0.044	U	0.044	MDL	0.21	PQL	ug/Kg	R	S
BETA-BHC	0.077	U	0.077	MDL	0.21	PQL	ug/Kg	R	S
Chlordane	1.0	U	1.0	MDL	4.4	PQL	ug/Kg	R	S
DELTA-BHC	0.046	U	0.046	MDL	0.21	PQL	ug/Kg	R	S
DIELDRIN	0.085	U	0.085	MDL	0.44	PQL	ug/Kg	R	S
ENDOSULFAN I	0.057	U	0.057	MDL	0.21	PQL	ug/Kg	R	S
ENDOSULFAN II	0.085	U	0.085	MDL	0.44	PQL	ug/Kg	R	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
ENDOSULFAN SULFATE	0.29	U	0.29	MDL	0.44	PQL	ug/Kg	R	S
ENDRIN	0.085	U	0.085	MDL	0.44	PQL	ug/Kg	R	S
ENDRIN ALDEHYDE	0.085	U	0.085	MDL	0.44	PQL	ug/Kg	R	S
ENDRIN KETONE	0.085	U	0.085	MDL	0.44	PQL	ug/Kg	R	S
gamma-BHC (Lindane)	0.044	U	0.044	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR	0.077	U	0.077	MDL	0.21	PQL	ug/Kg	R	S
HEPTACHLOR EPOXIDE	0.044	U	0.044	MDL	0.21	PQL	ug/Kg	R	S
METHOXYCHLOR	0.44	U	0.44	MDL	2.1	PQL	ug/Kg	R	S
MIREX	0.36	U	0.36	MDL	0.44	PQL	ug/Kg	R	S
TOXAPHENE	2.8	U	2.8	MDL	8.5	PQL	ug/Kg	R	S

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* DL-BASE/NEUTRAL *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDE	2.7		0.46	MDL	2.4	PQL	ug/Kg	J	C
4,4'-DDT	3.7		0.46	MDL	2.4	PQL	ug/Kg	J	C, * XIII

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *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	0.42	U	0.42	MDL	2.1	PQL	ug/Kg	UJ	FD
AROCLOR 1260	0.42	U	0.42	MDL	2.1	PQL	ug/Kg	UJ	FD
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	FD, L

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* RES *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	6.8	U	6.8	MDL	22	PQL	ug/Kg	UJ	L
Aroclor 5442	6.8	U	6.8	MDL	22	PQL	ug/Kg	UJ	L
Aroclor 5460	6.8	U	6.8	MDL	22	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *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	12		0.82	MDL	4.2	PQL	ug/Kg	J	S, FD
AROCLOR 1260	4.2	J	0.82	MDL	4.2	PQL	ug/Kg	J	S, FD
Aroclor 5432	2.5	U	2.5	MDL	8.2	PQL	ug/Kg	UJ	L
Aroclor 5442	2.5	U	2.5	MDL	8.2	PQL	ug/Kg	UJ	L
Aroclor 5460	8.0	J	2.5	MDL	8.2	PQL	ug/Kg	J	Z, S, FD, L

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 1:30:00 *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	3.1	J	0.80	MDL	4.1	PQL	ug/Kg	J	Z, * XIII
Aroclor 5432	2.4	U	2.4	MDL	8.0	PQL	ug/Kg	UJ	L
Aroclor 5442	2.4	U	2.4	MDL	8.0	PQL	ug/Kg	UJ	L
Aroclor 5460	9.6		2.4	MDL	8.0	PQL	ug/Kg	J	L

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 10:39:00 *Analysis Type:* RES *Dilution:* 10

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	15	U	15	MDL	49	PQL	ug/Kg	UJ	L
Aroclor 5442	15	U	15	MDL	49	PQL	ug/Kg	UJ	L
Aroclor 5460	15	U	15	MDL	49	PQL	ug/Kg	UJ	L

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
AROCLOR 1254	1.7	J	0.42	MDL	2.2	PQL	ug/Kg	J	Z, S, * XIII
AROCLOR 1260	1.3	J	0.42	MDL	2.2	PQL	ug/Kg	J	Z, S, * XIII
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	1.5	J	1.3	MDL	4.2	PQL	ug/Kg	J	Z, S, L

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5432	2.8	U	2.8	MDL	9.2	PQL	ug/Kg	UJ	L
Aroclor 5442	2.8	U	2.8	MDL	9.2	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
Aroclor 5460	140		2.8	MDL	9.2	PQL	ug/Kg	J	L

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *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)	0.18	J	0.095	MDL	0.21	PQL	ug/Kg	J	Z, FD, *IX
2,4-D	1.5	U	1.5	MDL	4.5	PQL	ug/Kg	UJ	C
DALAPON	5.6	U	5.6	MDL	11	PQL	ug/Kg	UJ	C
DINOSEB	1.0	U	1.0	MDL	3.0	PQL	ug/Kg	UJ	C

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4-D	1.6	U	1.6	MDL	4.9	PQL	ug/Kg	UJ	C
DALAPON	6.0	U	6.0	MDL	12	PQL	ug/Kg	UJ	C
DINOSEB	1.1	U	1.1	MDL	3.2	PQL	ug/Kg	UJ	C
MCPA	340	J	100	MDL	340	PQL	ug/Kg	J	* IX
MCPP	220	J	100	MDL	340	PQL	ug/Kg	J	Z

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
2,4,5-TP (Silvex)	0.093	U	0.093	MDL	0.21	PQL	ug/Kg	UJ	FD
2,4-D	1.5	U	1.5	MDL	4.4	PQL	ug/Kg	UJ	C
DALAPON	5.4	U	5.4	MDL	11	PQL	ug/Kg	UJ	C
DINOSEB	0.99	U	0.99	MDL	3.0	PQL	ug/Kg	UJ	C

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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
2,4-DB	2.3		0.75	MDL	2.1	PQL	ug/Kg	J	* IX

* denotes a non-reportable result

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

Data Qualifier Summary

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8270C **Matrix: SO**

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *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	22	J	21	MDL	420	PQL	ug/Kg	J	Z

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *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	1400	U	1400	MDL	4100	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	23	J	21	MDL	410	PQL	ug/Kg	J	Z

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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(G,H,I)PERYLENE	22	J	20	MDL	200	PQL	ug/Kg	J	Z

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
Butylbenzylphthalate	32	J	21	MDL	210	PQL	ug/Kg	J	Z

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *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	35	J	23	MDL	470	PQL	ug/Kg	J	Z

Method Category: SVOA

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

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *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(A)PYRENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD
BENZO(G,H,I)PERYLENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD
BENZO(K)FLUORANTHENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD
CHRYSENE	0.71	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z, FD
Di-n-octylphthalate	7.6	U	7.6	MDL	23	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: DUP01-SIV-QC-122010 *Collected:* 12/20/2010 8:32:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORANTHENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD
INDENO(1,2,3-CD)PYRENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD
PHENANTHRENE	0.85	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z, FD
PYRENE	0.84	U	0.84	MDL	2.1	PQL	ug/Kg	UJ	FD

Sample ID: SED-003-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 9:46:00 *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	1.9	J	0.90	MDL	2.3	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	1.0	J	0.90	MDL	2.3	PQL	ug/Kg	J	Z
Butylbenzylphthalate	17	J	8.1	MDL	24	PQL	ug/Kg	J	Z
FLUORANTHENE	1.5	J	0.90	MDL	2.3	PQL	ug/Kg	J	Z
NAPHTHALENE	0.91	J	0.90	MDL	2.3	PQL	ug/Kg	J	Z
PHENANTHRENE	1.3	J	0.90	MDL	2.3	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.90	MDL	2.3	PQL	ug/Kg	J	Z

Sample ID: SED-005-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 8:30:00 *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	1.2	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	2.6		0.82	MDL	2.1	PQL	ug/Kg	J	FD, C
BENZO(G,H,I)PERYLENE	1.9	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z, FD
BENZO(K)FLUORANTHENE	0.84	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z, FD
CHRYSENE	2.6		0.41	MDL	2.1	PQL	ug/Kg	J	FD
Di-n-octylphthalate	15	J	7.4	MDL	22	PQL	ug/Kg	J	Z, FD
FLUORANTHENE	2.6		0.82	MDL	2.1	PQL	ug/Kg	J	FD
INDENO(1,2,3-CD)PYRENE	1.4	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z, FD
N-NITROSODIMETHYLAMINE	0.82	U	0.82	MDL	2.1	PQL	ug/Kg	UJ	Q
PHENANTHRENE	1.6	J	0.82	MDL	2.1	PQL	ug/Kg	J	Z, FD
PYRENE	2.1		0.82	MDL	2.1	PQL	ug/Kg	J	FD

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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
ANTHRACENE	0.69	J	0.41	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: [illegible]

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

Sample ID: SED-007-SIV-SD-0.0-0.6 *Collected:* 12/20/2010 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	10		0.81	MDL	2.0	PQL	ug/Kg	J	I
BENZO(B)FLUORANTHENE	35		0.81	MDL	2.0	PQL	ug/Kg	J	I
BENZO(K)FLUORANTHENE	0.81	U	0.81	MDL	2.0	PQL	ug/Kg	UJ	I
Butylbenzylphthalate	14	J	7.3	MDL	22	PQL	ug/Kg	J	Z
DIBENZO(A,H)ANTHRACENE	5.7		0.81	MDL	2.0	PQL	ug/Kg	J	I
Di-n-octylphthalate	7.3	U	7.3	MDL	22	PQL	ug/Kg	UJ	I
INDENO(1,2,3-CD)PYRENE	5.9		0.81	MDL	2.0	PQL	ug/Kg	J	I
NAPHTHALENE	0.86	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.81	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SED-008-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
1-METHYLNAPHTHALENE	2.2	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z
2-METHYLNAPHTHALENE	2.1	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z
ANTHRACENE	0.51	J	0.50	MDL	2.5	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.6	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.4	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	2.0	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.2	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z
Butylbenzylphthalate	9.9	J	8.9	MDL	27	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.2	J	0.99	MDL	2.5	PQL	ug/Kg	J	Z

Sample ID: SED-034-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 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
BENZO(A)ANTHRACENE	1.2	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
INDENO(1,2,3-CD)PYRENE	1.8	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.1	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	2.0	J	0.86	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *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	0.71	J	0.47	MDL	2.3	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SED-037-SIV-SD-0.0-0.5 *Collected:* 12/20/2010 2:30:00 *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	1.1	J	0.47	MDL	2.3	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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_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: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_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

DE046

Method Blank Outlier Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P36208BB220516	12/30/2010 5:16:00 AM	PHOSPHORUS	1.73 mg/Kg	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5
P36208BB221423	12/30/2010 2:23:00 PM	TIN	1.33 mg/Kg	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-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-SIV-QC-122010(REA)	TIN	2.20 mg/Kg	2.20U mg/Kg
SED-003-SIV-SD-0.0-0.5(REA)	TIN	2.28 mg/Kg	2.28U mg/Kg
SED-005-SIV-SD-0.0-0.5(REA)	TIN	2.32 mg/Kg	2.32U mg/Kg
SED-007-SIV-SD-0.0-0.6(REA)	TIN	2.36 mg/Kg	2.36U mg/Kg
SED-008-SIV-SD-0.0-0.5(REA)	TIN	2.87 mg/Kg	2.87U mg/Kg
SED-034-SIV-SD-0.0-0.5(REA)	TIN	2.65 mg/Kg	2.65U mg/Kg
SED-037-SIV-SD-0.0-0.5(REA)	TIN	3.42 mg/Kg	3.42U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P36226AB221038A	1/5/2011 10:38:00 AM	COPPER	0.0909 mg/Kg	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_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
SED-005-SIV-SD-0.0-0.5MS (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	FLUORIDE	62	-	80.00-120.00	-	FLUORIDE	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-005-SIV-SD-0.0-0.5MS	4,4'-DDD	-	-	16.00-163.00	55 (50.00)	4,4'-DDD	J(all detects)
SED-005-SIV-SD-0.0-0.5MSD	4,4'-DDE	188	240	18.00-161.00	-	4,4'-DDE	
(SED-005-SIV-SD-0.0-0.5)	4,4'-DDT	-	186	10.00-176.00	-	4,4'-DDT	
	ENDOSULFAN II	-	-	28.00-154.00	51 (50.00)	ENDOSULFAN II	
	ENDRIN ALDEHYDE	-	-	10.00-148.00	63 (35.00)	ENDRIN ALDEHYDE	

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-005-SIV-SD-0.0-0.5MS SED-005-SIV-SD-0.0-0.5MSD (SED-005-SIV-SD-0.0-0.5)	DALAPON	90	93	12.00-86.00	-	DALAPON	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-005-SIV-SD-0.0-0.5MS	ARSENIC	-	135	75.00-125.00	-	ARSENIC	
SED-005-SIV-SD-0.0-0.5MSD	CADMIUM	129	126	75.00-125.00	-	CADMIUM	
(DUP01-SIV-QC-122010	NICKEL	130	141	75.00-125.00	-	NICKEL	
SED-003-SIV-SD-0.0-0.5	THALLIUM	129	-	75.00-125.00	-	THALLIUM	
SED-005-SIV-SD-0.0-0.5	VANADIUM	-	132	75.00-125.00	-	VANADIUM	J(all detects)
SED-007-SIV-SD-0.0-0.6	ZINC	-	144	75.00-125.00	-	ZINC	Zn No Qual, >4x
SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)							
SED-005-SIV-SD-0.0-0.5MS	ANTIMONY	40	45	75.00-125.00	-	ANTIMONY	
SED-005-SIV-SD-0.0-0.5MSD	LEAD	141	47	75.00-125.00	-	LEAD	
(DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)							J(all detects) UJ(all non-detects) Pb No Qual, >4x

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_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
SED-005-SIV-SD-0.0-0.5MS SED-005-SIV-SD-0.0-0.5MSD (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	MOLYBDENUM	133	135	75.00-125.00	-	MOLYBDENUM	J(all detects)
SED-005-SIV-SD-0.0-0.5MSD (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	BARIUM	-	227	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
SED-005-SIV-SD-0.0-0.5MS SED-005-SIV-SD-0.0-0.5MSD (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	ALUMINUM CALCIUM MAGNESIUM TITANIUM	1494 169 181 228	1284 147 136 200	75.00-125.00 75.00-125.00 75.00-125.00 75.00-125.00	- - - -	ALUMINUM CALCIUM MAGNESIUM TITANIUM	No Qual, >4x
SED-005-SIV-SD-0.0-0.5MS SED-005-SIV-SD-0.0-0.5MSD (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	IRON	543	-55	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
SED-005-SIV-SD-0.0-0.5MSD (SED-005-SIV-SD-0.0-0.5)	BENZIDINE	-	19	35.00-141.00	57 (30.00)	BENZIDINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_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
SED-005-SIV-SD-0.0-0.5MSD (SED-005-SIV-SD-0.0-0.5)	N-NITROSODIMETHYLAMINE	-	23	48.00-113.00	126 (30.00)	N-NITROSODIMETHYLAMINE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: DE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-005-SIV-SD-0.0-0.5DUP (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	FLUORIDE	55	20.00	No Qual OK by difference

Method: 314.0
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-005-SIV-SD-0.0-0.5DUP (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	PERCHLORATE	200	20.00	No Qual OK by difference

Method: 6010B
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-005-SIV-SD-0.0-0.5DUP (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	Zirconium	200	20.00	No Qual OK by difference

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-005-SIV-SD-0.0-0.5DUP (DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5)	ANTIMONY	200	20.00	J(all detects) UJ(all non-detects) Sb, Be, Tl No Qual OK by difference
	ARSENIC	43	20.00	
	BARIUM	38	20.00	
	BERYLLIUM	26	20.00	
	CHROMIUM	45	20.00	
	COBALT	36	20.00	
	COPPER	34	20.00	
	LEAD	26	20.00	
	MOLYBDENUM	0.2846	0.240 mg/Kg	
	NICKEL	46	20.00	
	THALLIUM	42	20.00	
	VANADIUM	36	20.00	
	ZINC	37	20.00	

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

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: DE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-005-SIV-SD-0.0-0.5DUP (DUP01-SIV-QC-122010 SED -003-SIV-SD-0.0-0.5 SED -005-SIV-SD-0.0-0.5 SED -007-SIV-SD-0.0-0.6 SED -008-SIV-SD-0.0-0.5 SED -034-SIV-SD-0.0-0.5 SED -037-SIV-SD-0.0-0.5)	HEXAVALENT CHROMIUM	22	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: PrepDE046_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
P03565AQ241458A P03565AY241439A (DUP01 -SIV-QC-122010 SED -003-SIV-SD-0.0-0.5 SED -005-SIV-SD-0.0-0.5 SED -007-SIV-SD-0.0-0.6 SED -008-SIV-SD-0.0-0.5 SED -034-SIV-SD-0.0-0.5 SED -037-SIV-SD-0.0-0.5)	Aroclor 5442	69	53	75.00-125.00	-	Aroclor 5432, 5442, 5460	J (all detects) UJ (all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03638AQ241258A (DUP01 -SIV-QC-122010 SED -003-SIV-SD-0.0-0.5 SED -005-SIV-SD-0.0-0.5 SED -007-SIV-SD-0.0-0.6 SED -008-SIV-SD-0.0-0.5 SED -034-SIV-SD-0.0-0.5 SED -037-SIV-SD-0.0-0.5)	HEPTACHLOR EPOXIDE	136	-	65.00-131.00	-	HEPTACHLOR EPOXIDE	J(all detects)

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03659AQ242126A (DUP01 -SIV-QC-122010 SED -003-SIV-SD-0.0-0.5 SED -005-SIV-SD-0.0-0.5 SED -007-SIV-SD-0.0-0.6 SED -008-SIV-SD-0.0-0.5 SED -034-SIV-SD-0.0-0.5 SED -037-SIV-SD-0.0-0.5)	DALAPON	91	-	24.00-89.00	-	DALAPON	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P36226AQ221041A (DUP01 -SIV-QC-122010 SED -003-SIV-SD-0.0-0.5 SED -005-SIV-SD-0.0-0.5 SED -007-SIV-SD-0.0-0.6 SED -008-SIV-SD-0.0-0.5 SED -034-SIV-SD-0.0-0.5 SED -037-SIV-SD-0.0-0.5)	ANTIMONY	61	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

Surrogate Outlier Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_v1 eQAPP Name: CDM_SSFL_110509

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-003-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	270	20.00-120.00	All Target Analytes	J (all detects)
SED-005-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	43	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SED-008-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	0	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SED-008-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	15	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SED-034-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	8	20.00-120.00	All Target Analytes	J(all detects) R(all non-detects)
SED-034-SIV-SD-0.0-0.5	TETRACHLORO-M-XYLENE	20	50.00-130.00	All Target Analytes	J(all detects) UJ(all non-detects)
SED-037-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	348	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
SED-003-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	122	45.00-120.00	All Target Analytes	No Qual Diluted Out
SED-005-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	134	45.00-120.00	All Target Analytes	J(all detects)
SED-034-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	157	45.00-120.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_v1 eQAPP Name: CDM_SSFL_110509

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
MOISTURE	19.1	20.8	9		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
FLUORIDE	2.6	2.3	12	50.00	No Qualifiers Applied

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
ALUMINUM	15200	15100	1	50.00	
BORON	4.11	5.00	20	50.00	
CALCIUM	2560	2620	2	50.00	
IRON	19200	18600	3	50.00	
LITHIUM	22.6	22.7	0	50.00	
MAGNESIUM	4420	4410	0	50.00	
MANGANESE	287	287	0	50.00	No Qualifiers Applied
PHOSPHORUS	451	462	2	50.00	
POTASSIUM	3360	3130	7	50.00	
SODIUM	75.7	75.0	1	50.00	
STRONTIUM	15.8	16.2	2	50.00	
TIN	2.32	2.20	5	50.00	
TITANIUM	1140	1090	4	50.00	
Zirconium	6.00 U	1.20	200	50.00	J(all detects) UJ(all non-detects)

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
ANTIMONY	0.166	0.134	21	50.00	
ARSENIC	5.63	5.30	6	50.00	
BARIUM	113	122	8	50.00	
BERYLLIUM	0.649	0.646	0	50.00	
CADMIUM	0.224	0.267	18	50.00	
CHROMIUM	25.3	21.4	17	50.00	
COBALT	6.97	6.69	4	50.00	
COPPER	11.0	10.4	6	50.00	
LEAD	16.5	18.4	11	50.00	No Qualifiers Applied
MOLYBDENUM	0.819	0.747	9	50.00	
NICKEL	17.6	16.3	8	50.00	
SELENIUM	0.199	0.183	8	50.00	
SILVER	0.0489	0.0727	39	50.00	
THALLIUM	0.358	0.366	2	50.00	
VANADIUM	43.7	40.6	7	50.00	
ZINC	82.4	86.4	5	50.00	

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

Field Duplicate RPD Report

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_v1 eQAPP Name: CDM_SSFL_110509

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
HEXAVALENT CHROMIUM	0.60	0.37	47	50.00	No Qualifiers Applied

Method: 7471A
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
MERCURY	0.0309	0.0285	8	50.00	No Qualifiers Applied

Method: 8081A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
4,4'-DDE	0.53 U	0.71	200	50.00	J(all detects) UJ(all non-detects)
4,4'-DDT	0.83 U	0.86	200	50.00	
ENDRIN ALDEHYDE	0.42 U	0.27	200	50.00	
HEPTACHLOR EPOXIDE	0.21 U	0.078	200	50.00	
MIREX	0.42 U	0.095	200	50.00	

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
AROCLOR 1254	12	2.1 U	200	50.00	J(all detects) UJ(all non-detects)
AROCLOR 1260	4.2	2.1 U	200	50.00	
Aroclor 5460	8.0	4.2 U	200	50.00	

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
2,4,5-TP (Silvex)	0.21 U	0.18	200	50.00	J(all detects) UJ(all non-detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: DE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
BENZO(A)PYRENE	1.2	2.1 U	200	50.00	
BENZO(B)FLUORANTHENE	2.6	2.1 U	200	50.00	
BENZO(G,H,I)PERYLENE	1.9	2.1 U	200	50.00	
BENZO(K)FLUORANTHENE	0.84	2.1 U	200	50.00	
CHRYSENE	2.6	0.71	114	50.00	J(all detects)
Di-n-octylphthalate	15	23 U	200	50.00	UJ(all non-detects)
FLUORANTHENE	2.6	2.1 U	200	50.00	
INDENO(1,2,3-CD)PYRENE	1.4	2.1 U	200	50.00	
PHENANTHRENE	1.6	0.85	61	50.00	
PYRENE	2.1	2.1 U	200	50.00	

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
BIS(2-ETHYLHEXYL)PHTHALATE	23	22	4	50.00	No Qualifiers Applied

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
PH	6.64	5.94	11	50.00	No Qualifiers Applied

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SED-005-SIV-SD-0.0-0.5	DUP01-SIV-QC-122010			
Oxidation Reduction Potential	434	541	22		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE046 Laboratory: LL

EDD Filename: DE046_v1 eQAPP Name: CDM_SSFL_110509

Method: 314.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-008-SIV-SD-0.0-0.5	PERCHLORATE	J	29.4	44.6	PQL	ug/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	BORON	J	5.00	6.07	PQL	mg/Kg	J (all detects)
	SODIUM	J	75.0	121	PQL	mg/Kg	
	TIN	J	2.20	12.1	PQL	mg/Kg	
	Zirconium	J	1.20	6.07	PQL	mg/Kg	
SED-003-SIV-SD-0.0-0.5	BORON	J	5.57	6.44	PQL	mg/Kg	J (all detects)
	SODIUM	J	99.8	129	PQL	mg/Kg	
	TIN	J	2.28	12.9	PQL	mg/Kg	
	Zirconium	J	1.21	6.44	PQL	mg/Kg	
SED-005-SIV-SD-0.0-0.5	BORON	J	4.11	6.00	PQL	mg/Kg	J (all detects)
	SODIUM	J	75.7	120	PQL	mg/Kg	
	TIN	J	2.32	12.0	PQL	mg/Kg	
SED-007-SIV-SD-0.0-0.6	SODIUM	J	69.5	118	PQL	mg/Kg	J (all detects)
	TIN	J	2.36	11.8	PQL	mg/Kg	
	Zirconium	J	1.02	5.91	PQL	mg/Kg	
SED-008-SIV-SD-0.0-0.5	BORON	J	6.76	7.08	PQL	mg/Kg	J (all detects)
	SODIUM	J	82.4	142	PQL	mg/Kg	
	TIN	J	2.87	14.2	PQL	mg/Kg	
	Zirconium	J	1.44	7.08	PQL	mg/Kg	
SED-034-SIV-SD-0.0-0.5	BORON	J	5.57	6.30	PQL	mg/Kg	J (all detects)
	SODIUM	J	56.6	126	PQL	mg/Kg	
	TIN	J	2.65	12.6	PQL	mg/Kg	
SED-037-SIV-SD-0.0-0.5	SODIUM	J	121	137	PQL	mg/Kg	J (all detects)
	TIN	J	3.42	13.7	PQL	mg/Kg	
	Zirconium	J	1.54	6.85	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	ANTIMONY	J	0.134	0.248	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.183	0.495	PQL	mg/Kg	
	SILVER	J	0.0727	0.124	PQL	mg/Kg	
SED-003-SIV-SD-0.0-0.5	ANTIMONY	J	0.104	0.265	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.155	0.531	PQL	mg/Kg	
	SILVER	J	0.0333	0.133	PQL	mg/Kg	
SED-005-SIV-SD-0.0-0.5	ANTIMONY	J	0.166	0.240	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.480	PQL	mg/Kg	
	SILVER	J	0.0489	0.120	PQL	mg/Kg	
SED-007-SIV-SD-0.0-0.6	ANTIMONY	J	0.145	0.234	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.168	0.468	PQL	mg/Kg	
	SILVER	J	0.0542	0.117	PQL	mg/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: DE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-008-SIV-SD-0.0-0.5	ANTIMONY	J	0.109	0.297	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.199	0.594	PQL	mg/Kg	
	SILVER	J	0.0811	0.149	PQL	mg/Kg	
SED-034-SIV-SD-0.0-0.5	SELENIUM	J	0.143	0.494	PQL	mg/Kg	J (all detects)
	SILVER	J	0.0249	0.124	PQL	mg/Kg	
SED-037-SIV-SD-0.0-0.5	ANTIMONY	J	0.249	0.266	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.266	0.532	PQL	mg/Kg	
	SILVER	J	0.127	0.133	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	HEXAVALENT CHROMIUM	J	0.37	1.3	PQL	mg/Kg	J (all detects)
SED-005-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.60	1.2	PQL	mg/Kg	J (all detects)
SED-037-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.63	1.4	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	MERCURY	J	0.0285	0.125	PQL	mg/Kg	J (all detects)
SED-003-SIV-SD-0.0-0.5	MERCURY	J	0.0761	0.128	PQL	mg/Kg	J (all detects)
SED-005-SIV-SD-0.0-0.5	MERCURY	J	0.0309	0.120	PQL	mg/Kg	J (all detects)
SED-007-SIV-SD-0.0-0.6	MERCURY	J	0.0257	0.114	PQL	mg/Kg	J (all detects)
SED-008-SIV-SD-0.0-0.5	MERCURY	J	0.106	0.148	PQL	mg/Kg	J (all detects)
SED-037-SIV-SD-0.0-0.5	MERCURY	J	0.0210	0.131	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	ENDRIN ALDEHYDE	J	0.27	0.43	PQL	ug/Kg	J (all detects)
	HEPTACHLOR EPOXIDE	J	0.078	0.21	PQL	ug/Kg	
	MIREX	J	0.095	0.43	PQL	ug/Kg	
SED-003-SIV-SD-0.0-0.5	gamma-BHC (Lindane)	J	0.058	0.22	PQL	ug/Kg	J (all detects)
SED-007-SIV-SD-0.0-0.6	gamma-BHC (Lindane)	J	0.060	0.20	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE046 **Laboratory:** LL

EDD Filename: DE046_v1 **eQAPP Name:** CDM_SSFL_110509

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-005-SIV-SD-0.0-0.5	Aroclor 5460	J	8.0	8.2	PQL	ug/Kg	J (all detects)
SED-007-SIV-SD-0.0-0.6	AROCLOR 1254	J	3.1	4.1	PQL	ug/Kg	J (all detects)
SED-034-SIV-SD-0.0-0.5	AROCLOR 1254	J	1.7	2.2	PQL	ug/Kg	J (all detects)
	AROCLOR 1260	J	1.3	2.2	PQL	ug/Kg	
	Aroclor 5460	J	1.5	4.2	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	2,4,5-TP (Silvex)	J	0.18	0.21	PQL	ug/Kg	J (all detects)
SED-003-SIV-SD-0.0-0.5	MCPP	J	220	340	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	BIS(2-ETHYLHEXYL)PHTHALATE	J	22	420	PQL	ug/Kg	J (all detects)
SED-005-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	23	410	PQL	ug/Kg	J (all detects)
SED-007-SIV-SD-0.0-0.6	BENZO(G,H,I)PERYLENE	J	22	200	PQL	ug/Kg	J (all detects)
SED-034-SIV-SD-0.0-0.5	Butylbenzylphthalate	J	32	210	PQL	ug/Kg	J (all detects)
SED-037-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	35	470	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP01-SIV-QC-122010	CHRYSENE	J	0.71	2.1	PQL	ug/Kg	J (all detects)
	PHENANTHRENE	J	0.85	2.1	PQL	ug/Kg	
SED-003-SIV-SD-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.9	2.3	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.0	2.3	PQL	ug/Kg	
	Butylbenzylphthalate	J	17	24	PQL	ug/Kg	
	FLUORANTHENE	J	1.5	2.3	PQL	ug/Kg	
	NAPHTHALENE	J	0.91	2.3	PQL	ug/Kg	
	PHENANTHRENE	J	1.3	2.3	PQL	ug/Kg	
	PYRENE	J	1.3	2.3	PQL	ug/Kg	
SED-005-SIV-SD-0.0-0.5	BENZO(A)PYRENE	J	1.2	2.1	PQL	ug/Kg	J (all detects)
	BENZO(G,H,I)PERYLENE	J	1.9	2.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.84	2.1	PQL	ug/Kg	
	Di-n-octylphthalate	J	15	22	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.4	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	2.1	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE046 **Laboratory: LL**

EDD Filename: DE046_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	*Analyte*	*Lab Qual*	*Result*	*Reporting Limit*	*RL Type*	*Units*	*Flag*
SED-007-SIV-SD-0.0-0.6	ANTHRACENE	J	0.69	2.0	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	14	22	PQL	ug/Kg	
	NAPHTHALENE	J	0.86	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.0	PQL	ug/Kg	
SED-008-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	2.2	2.5	PQL	ug/Kg	J (all detects)
	2-METHYLNAPHTHALENE	J	2.1	2.5	PQL	ug/Kg	
	ANTHRACENE	J	0.51	2.5	PQL	ug/Kg	
	BENZO(A)ANTHRACENE	J	1.6	2.5	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.4	2.5	PQL	ug/Kg	
	BENZO(G,H,I)PERYLENE	J	2.0	2.5	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.2	2.5	PQL	ug/Kg	
	Butylbenzylphthalate	J	9.9	27	PQL	ug/Kg	
	INDENO(1,2,3-CD)PYRENE	J	1.2	2.5	PQL	ug/Kg	
SED-034-SIV-SD-0.0-0.5	BENZO(A)ANTHRACENE	J	1.2	2.1	PQL	ug/Kg	J (all detects)
	INDENO(1,2,3-CD)PYRENE	J	1.8	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.1	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	2.0	2.1	PQL	ug/Kg	
SED-037-SIV-SD-0.0-0.5	ACENAPHTHYLENE	J	0.71	2.3	PQL	ug/Kg	J (all detects)
	ANTHRACENE	J	1.1	2.3	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:	December 20, 2010
LDC Report Date:	June 8, 2011
Matrix:	Sediment
Parameters:	Semivolatiles
Validation Level:	Level IV
Laboratory:	Lancaster Laboratories
Sample Delivery Group (SDG):	DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5MSD

Introduction

This data review covers 9 sediment 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 semilvolatile 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
SED-005-SIV-SD-0.0-0.5MS/MSD (SED-005-SIV-SD-0.0-0.5)	Benzidine	-	19 (35-141)	57 (≤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 DE046	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 DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Bis(2-ethylhexyl)phthalate	22	23	4 (≤50)	-	-

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE046

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE046	SED-005-SIV-SD-0.0-0.5	Benzidine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	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 DE046

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E2a **VALIDATION COMPLETENESS WORKSHEET** Date: 6/3/11
SDG #: DE046 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270C)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/20/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%D RSD ≤ 30, r^2
IV.	Continuing calibration/ICV	A	ICV/CCV ≤ 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	SW	D = 1, 3
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: sediments

1	DUP01-SIV-QC-122010	11	SBLKLF3626	21		31	
2	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5	13		23		33	
4	SED-007-SIV-SD-0.0-0.6	14		24		34	
5	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5MSD	19		29		39	
10		20		30		40	

LDC #: 25SDE2a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. GC/MS				
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. 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. Calibration Verification				
Was a continuing calibration standard analyzed at least once every 12 hours for each instrument?	✓			
Were all percent differences (%D) and relative response factors (RRF) within method criteria for all CCCs and SPCCs?	✓			
Were all percent differences (%D) ≤ 25% and relative response factors (RRF) ≥ 0.05?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
VII. Matrix Spike/Matrix Spike Duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory Control Samples				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25502a

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

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?	✓			
[illegible]				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
[illegible]				
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?	✓			
[illegible]				
Were relative retention times (RRT's) within ± 0.06 RRT units of the standard?	✓			
Did compound spectra meet specified EPA "Functional Guidelines" criteria?	✓			
Were chromatogram peaks verified and accounted for?	✓			
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?	✓			
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)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.				
Target compounds were detected in the field duplicates.				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

METHOD: GC/MS BNA (EPA Method 8270)

A. Phenol	P. Bis(2-chloroethoxy)methane	EE. 2,6-Dinitrotoluene	TT. Pentachlorophenol	III. Benzo(a)pyrene
B. Bis (2-chloroethyl) ether	Q. 2,4-Dichlorophenol	FF. 3-Nitroaniline	UU. Phenanthrene	JJJ. Indeno(1,2,3-cd)pyrene
C. 2-Chlorophenol	R. 1,2,4-Trichlorobenzene	GG. Acenaphthene	VV. Anthracene	KKK. Dibenz(a,h)anthracene
D. 1,3-Dichlorobenzene	S. Naphthalene	HH. 2,4-Dinitrophenol	WW. Carbazole	LLL. Benzo(g,h,i)perylene
E. 1,4-Dichlorobenzene	T. 4-Chloroaniline	II. 4-Nitrophenol	XX. Di-n-butylphthalate	MMM. Bis(2-Chloroisopropyl)ether
F. 1,2-Dichlorobenzene	U. Hexachlorobutadiene	JJ. Dibenzofuran	YY. Fluoranthene	NNN. Aniline
G. 2-Methylphenol	V. 4-Chloro-3-methylphenol	KK. 2,4-Dinitrotoluene	ZZ. Pyrene	OOO. N-Nitrosodimethylamine
H. 2,2'-Oxybis(1-chloropropane)	W. 2-Methylnaphthalene	LL. Diethylphthalate	AAA. Butylbenzylphthalate	PPP. Benzoic Acid
I. 4-Methylphenol	X. Hexachlorocyclopentadiene	MM. 4-Chlorophenyl-phenyl ether	BBB. 3,3'-Dichlorobenzidine	QQQ. Benzyl alcohol
J. N-Nitroso-di-n-propylamine	Y. 2,4,6-Trichlorophenol	NN. Fluorene	CCC. Benzo(a)anthracene	RRR. Pyridine
K. Hexachloroethane	Z. 2,4,5-Trichlorophenol	OO. 4-Nitroaniline	DDD. Chrysene	SSS. Benzidine
L. Nitrobenzene	AA. 2-Chloronaphthalene	PP. 4,6-Dinitro-2-methylphenol	EEE. Bis(2-ethylhexyl)phthalate	TTT. 1-Methylnaphthalene
M. Isophorone	BB. 2-Nitroaniline	QQ. N-Nitrosodiphenylamine (1)	FFF. Di-n-octylphthalate	UUU.
N. 2-Nitrophenol	CC. Dimethylphthalate	RR. 4-Bromophenyl-phenylether	GGG. Benzo(b)fluoranthene	VVV.
O. 2,4-Dimethylphenol	DD. Acenaphthylene	SS. Hexachlorobenzene	HHH. Benzo(k)fluoranthene	WWW.

LDC #: 25550E2a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: [illegible]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

(Y) N N/A — Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.

(Y) N N/A — Was a MS/MSD analyzed every 20 samples of each matrix?

Y (N) N/A — Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8+9	SSS	( )	19 (35-141)	59 (30)	3	J/UJ/A

MSD.2S

LDC #: 25550 EDQ

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ng/kg)		≤ 50 RPD
	1	3	
EEE	22	23	4

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 25550E29

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

$RRF = (A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
$\%RSD = 100 * (S/X)$

A_x = Area of compound, 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 RRF (50 std)	Recalculated RRF (50 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/12/11	Phenol (1st internal standard)	2.133	2.133	2.123	2.123	5	5
			~~Naphthalene~~ nitrobenzene (2nd internal standard)	0.536	0.536	0.516	0.516	4	4
			~~Fluorene~~ 4-Nitrophenol (3rd internal standard)	0.315	0.315	0.283	0.283	10	10
			Pentachlorophenol (4th internal standard)	0.163	0.163	0.149	0.149	14	14
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.749	0.749	0.672	0.672	14	14
			Benzo(a)pyrene (6th internal standard)	1.339	1.339	1.266	1.266	9	9
2			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to 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 #: 25550 E2a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	FA0511	1/18/11	Phenol (1st internal standard)	2.123	2.208	2.208	4	4
			Nitrobenzene (2nd internal standard)	0.516	0.550	0.550	7	7
			4-Nitrophenol (3rd internal standard)	0.283	0.264	0.264	7	7
			Pentachlorophenol (4th internal standard)	0.149	0.133	0.133	11	11
			Bis(2-ethylhexyl)phthalate (5th internal standard)	0.672	0.667	0.667	1	1
			Benzo(a)pyrene (6th internal standard)	1.266	1.284	1.284	1	1
2	FA0531	1/18/11	Phenol (1st internal standard)		2.175	2.175	2	2
			Nitrobenzene (2nd internal standard)		0.551	0.551	7	7
			4-Nitrophenol (3rd internal standard)		0.296	0.296	5	5
			Pentachlorophenol (4th internal standard)		0.151	0.151	1	1
			Bis(2-ethylhexyl)phthalate (5th internal standard)		0.732	0.732	9	9
			Benzo(a)pyrene (6th internal standard)		1.346	1.346	6	6
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25550E2A

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer: C

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	100	72.853	73	73	0
2-Fluorobiphenyl	↓	82.277	82	82	↓
Terphenyl-d14	↓	81.911	82	82	↓
Phenol-d5	200	161.947	81	81	↓
2-Fluorophenol	↓	164.312	82	82	↓
2,4,6-Tribromophenol	↓	161.078	81	81	↓
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

Sample ID:

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5					
2-Fluorobiphenyl					
Terphenyl-d14					
Phenol-d5					
2-Fluorophenol					
2,4,6-Tribromophenol					
2-Chlorophenol-d4					
1,2-Dichlorobenzene-d4					

LDC #: 25550E09

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer: C

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA

Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = 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	2057.61	2057.61	ND	1763.08	1906.12	86	86	93	93	8	8
N-Nitroso-di-n-propylamine	↓	↓	↓	1765.70	1845.19	86	86	90	90	4	4
4-Chloro-3-methylphenol	↓	↓	↓	1859.95	1873.19	90	90	91	91	1	1
Acenaphthene											
Pentachlorophenol	↓	↓	↓	1619.94	1638.15	79	79	80	80	1	1
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 #: 25550E07

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

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	1666.67	NA	1504.72	NA	90	90				
N-Nitroso-di-n-propylamine	↓	↓	1435.71	↓	86	86				
4-Chloro-3-methylphenol	↓	↓	1532.77	↓	92	92				
Acenaphthene										
Pentachlorophenol	↓	NA	1339.51	NA	80	80	NA			
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 #: 25550E2a

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_l)(\%S)}$

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_l	=	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 , EET:

Conc. = $\frac{(8514)(40)(1000)(\quad)(\quad)}{(956572)(0.672)(30)(0.792)(\quad)}$

=

22 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: December 20, 2010

LDC Report Date: June 8, 2011

Matrix: Sediment

Parameters: Semivolatiles

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5MSD

Introduction

This data review covers 9 sediment 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.

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 with the following exceptions:

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 with the following exceptions:

Date	Compound	%D	Associated Samples	Flag	A or P
1/9/11	Benzo(b)fluoranthene	27	SED-005-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5MS SED-005-SIV-SD-0.0-0.5MSD SBLKLK362	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
SED-005-SIV-SD-0.0-0.5MS/MSD (SED-005-SIV-SD-0.0-0.5)	N-Nitrosodimethylamine	-	23 (48-113)	126 (≤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 with the following exceptions:

Sample	Internal Standards	Area (Limits)	Compound	Flag	A or P
SED-007-SIV-SD-0.0-0.6	Perylene-d12	148031 (251077-1004306)	Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene	J (all detects) UJ (all non-detects)	A

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 DE046	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 DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 were identified as field duplicates. No semivolatiles were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Chrysene	0.71	2.6	114 (≤50)	J (all detects)	A
Phenanthrene	0.85	1.6	61 (≤50)	J (all detects)	A
Benzo(a)pyrene	2.1U	1.2	200 (≤50)	J (all detects) UJ (all non-detects	A
Benzo(b)fluoranthene	2.1U	2.6	200 (≤50)	J (all detects) UJ (all non-detects	A

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Benzo(g,h,i)perylene	2.1U	1.9	200 (≤50)	J (all detects) UJ (all non-detects	A
Benzo(k)fluoranthene	2.1U	0.84	200 (≤50)	J (all detects) UJ (all non-detects	A
Fluoranthene	2.1U	2.6	200 (≤50)	J (all detects) UJ (all non-detects	A
Indeno(1,2,3-cd)pyrene	2.1U	1.4	200 (≤50)	J (all detects) UJ (all non-detects	A
Di-n-octylphthalate	23U	15	200 (≤50)	J (all detects) UJ (all non-detects	A
Pyrene	2.1U	2.1	200 (≤50)	J (all detects) UJ (all non-detects	A

Santa Susana Field Laboratory
Semivolatiles - Data Qualification Summary - SDG DE046

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE046	SED-005-SIV-SD-0.0-0.5	Benzo(b)fluoranthene	J (all detects) UJ (all non-detects)	A	Continuing calibration (ICV %D) (C)
DE046	SED-005-SIV-SD-0.0-0.5	N-Nitrosodimethylamine	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R)(RPD) (Q)
DE046	SED-007-SIV-SD-0.0-0.6	Di-n-octylphthalate Benzo(b)fluoranthene Benzo(k)fluoranthene Benzo(a)pyrene Indeno(1,2,3-cd)pyrene Dibenzo(a,h)anthracene	J (all detects) UJ (all non-detects)	A	Internal standards (area) (I)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE046	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5	Chrysene Phenanthrene	J (all detects) J (all detects)	A	Field duplicates (RPD) (FD)
DE046	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5	Benzo(a)pyrene Benzo(b)fluoranthene Benzo(g,h,i)perylene Benzo(k)fluoranthene Fluoranthene Indeno(1,2,3-cd)pyrene Di-n-octylphthalate Pyrene	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Semivolatiles - Laboratory Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Semivolatiles - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E2b **VALIDATION COMPLETENESS WORKSHEET** Date: 6/3/11
SDG #: DE046 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: [illegible]
2nd Reviewer: [illegible]

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: 12/20/10
II.	GC/MS Instrument performance check	A	
III.	Initial calibration	A	%RSD ≤ 30, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV
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	SW	
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 = 1, 3
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: sediments

1	DUP01-SIV-QC-122010	11	SBLKLK362	21		31	
2	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5	13		23		33	
4	SED-007-SIV-SD-0.0-0.6	14		24		34	
5	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5MSD	19		29		39	
10		20		30		40	

LDC #: 25SDE26

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer: [illegible]

Method: Semivolatiles (EPA SW 846 Method 8270C)

Validation Area	Yes	No	NA	Findings/Comments
Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
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?	✓			
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?	✓			
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?		✓		
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.		✓		
Surrogates				
Were all surrogate %R within QC limits?	✓			
If 2 or more base neutral or acid surrogates were outside QC limits, was a reanalysis performed to confirm %R?			✓	
If any %R was less than 10 percent, was a reanalysis performed to confirm %R?			✓	
Matrix spike/Matrix spike duplicate				
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?		✓		
Laboratory control samples (LCS)				
Was an LCS analyzed for this SDG?	✓			

LDC #: 25550E2D

VALIDATION FINDINGS CHECKLIST

Reviewer: FT
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓			
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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?	✓			
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?	✓			
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?	✓			
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)?			✓	
System performance was found to be acceptable.	✓			
Overall assessment of data was found to be acceptable.	✓			
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

VALIDATION FINDINGS WORKSHEET

cMETHOD: GC/MS BNA (EPA Method 8270)

PRY

A. Phenol	S. Naphthalene	KK. 2,4-Dinitrotoluene	CCC. Benzo(a)anthracene	UUU.Benzo(b)thiophene
B. Bis (2-chloroethyl) ether	T. 4-Chloroaniline	LL. Diethylphthalate	DDD. Chrysene	VVV.Naphthobenzothiophene
C. 2-Chlorophenol	U. Hexachlorobutadiene	MM. 4-Chlorophenyl-phenyl ether	EEE. Bis(2-ethylhexyl)phthalate	WWW.Benzo(e)pyrene
D. 1,3-Dichlorobenzene	V. 4-Chloro-3-methylphenol	NN. Fluorene	FFF. Di-n-octylphthalate	XXX. 2,6-Dimethylnaphthalene
E. 1,4-Dichlorobenzene	W. 2-Methylnaphthalene	OO. 4-Nitroaniline	GGG. Benzo(b)fluoranthene	YYY. 2,3,5-Trimethylnaphthalene
F. 1,2-Dichlorobenzene	X. Hexachlorocyclopentadiene	PP. 4,6-Dinitro-2-methylphenol	HHH. Benzo(k)fluoranthene	ZZZ. Perylene
G. 2-Methylphenol	Y. 2,4,6-Trichlorophenol	QQ. N-Nitrosodiphenylamine (1)	III. Benzo(a)pyrene	AAAA. Dibenzothiophene
H. 2,2'-Oxybis(1-chloropropane)	Z. 2,4,5-Trichlorophenol	RR. 4-Bromophenyl-phenylether	JJJ. Indeno(1,2,3-cd)pyrene	BBBB. Benzo(a)fluoranthene
I. 4-Methylphenol	AA. 2-Chloronaphthalene	SS. Hexachlorobenzene	KKK. Dibenz(a,h)anthracene	CCCC. Benzo(b)fluorene
J. N-Nitroso-di-n-propylamine	BB. 2-Nitroaniline	TT. Pentachlorophenol	LLL. Benzo(g,h,i)perylene	DDDD. cis/trans-Decalin
K. Hexachloroethane	CC. Dimethylphthalate	UU. Phenanthrene	MMM. Bis(2-Chloroisopropyl)ether	EEEE. Biphenyl
L. Nitrobenzene	DD. Acenaphthylene	VV. Anthracene	NNN. Aniline	FFFF. Retene
M. Isophorone	EE. 2,6-Dinitrotoluene	WW. Carbazole	OOO. N-Nitrosodimethylamine	GGGG. C30-Hopane
N. 2-Nitrophenol	FF. 3-Nitroaniline	XX. Di-n-butylphthalate	PPP. Benzoic Acid	
O. 2,4-Dimethylphenol	GG. Acenaphthene	YY. Fluoranthene	QQQ. Benzyl alcohol	
P. Bis(2-chloroethoxy)methane	HH. 2,4-Dinitrophenol	ZZ. Pyrene	RRR. Pyridine	
Q. 2,4-Dichlorophenol	II. 4-Nitrophenol	AAA. Butylbenzylphthalate	SSS. Benzidine	
R. 1,2,4-Trichlorobenzene	JJ. Dibenzofuran	BBB. 3,3'-Dichlorobenzidine	TTT. 1-Methylnaphthalene	

LDC #: 25550E26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a 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
	1/9/11	ICV	GGG	27		SBLKLK362, 3, 8, 9	J/UJ/A

LDC #: 25550E2b

VALIDATION FINDINGS WORKSHEET

Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer: ✓

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A 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	θθθ	( )	23 (48-113)	126 (30)	3	J/UJ/A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		

LDC #: 25550E2b
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Internal Standards

Reviewer: [signature]
2nd Reviewer: [signature]

METHOD: GC/MS BNA (EPA SW 846 Method 8270)
Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
Y N N/A Were all internal standard area counts within -50 to +100 of the associated calibration standard?
Y N N/A Were the retention times of the internal standards within +/- 30 seconds of the retention times of the associated calibration standard?

#	Date	Sample ID	Internal Standard	Area (Limits)	RT (Limits)	Qualifications
		4	PRY	148031 (251077-1004306)		J/UJ/R see list

* QC limits are advisory
IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10
IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

LDC #: 25550E2b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer: FT
2nd reviewer: A

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds identified in the field duplicate pairs?

Compound	Concentration (ug/kg) 1	3	≤ 50 RPD	
DDD	0.71	2.6	114	J/Add
UU	0.85	1.6	61	↓
III	2-1 ~~0.84~~ U	1.2	200	J/UJ/A
GGG	2-1 ~~0.84~~ U	2.6	↓	↓
LLL	2-1 ~~0.84~~ U	1.9	↓	↓

Compound	Concentration (ug/kg) 1	3	≤ 50 RPD	
HHH	2-1 ~~0.84~~ U	0.84	200	J/UJ/A
YY	2-1 ~~0.84~~ U	2.6	↓	↓
JJJ	2-1 ~~0.84~~ U	1.4	↓	↓
FFF	2-1 ~~3.7~~ 6U	15	↓	↓
ZZ	2-1 ~~0.84~~ U	2.1	↓	↓

Compound	Concentration ( )		RPD

Compound	Concentration ( )		RPD

LDC #: 25350 E2D

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The Relative Response Factor (RRF), average RRF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

RRF = $(A_x)(C_{is})/(A_{is})(C_x)$
average RRF = sum of the RRFs/number of standards
%RSD = 100 * (S/X)

A_x = Area of compound,
C_x = Concentration of compound,
S = Standard deviation of the RRFs,

A_{is} = Area of associated internal standard
C_{is} = Concentration of internal standard
X = Mean of the RRFs

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Reported RRF (1 std)	Recalculated RRF (1 std)	Reported Average RRF (initial)	Recalculated Average RRF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/9/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	1.042	1.042	1.096	1.096	8	8
			Fluorene (3rd internal standard)	1.178	1.178	1.319	1.319	11	11
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.158	1.158	1.140	1.140	10	10
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.160	1.160	1.216	1.216	8	8
			Benzo(a)pyrene (6th internal standard)	1.121	1.121	1.137	1.137	12	12
2	ICAL	1/11/11	~~Phenol (1st internal standard)~~						
			Naphthalene (2nd internal standard)	0.984	0984	1.085	1.085	10	10
			Fluorene (3rd internal standard)	1.279	1.279	1.315	1.315	9	9
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.055	1.055	1.131	1.131	9	9
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.109	1.109	1.175	1.175	8	8
			Benzo(a)pyrene (6th internal standard)	1.087	1.087	1.128	1.128	9	9
3			Phenol (1st internal standard)						
			Naphthalene (2nd internal standard)						
			Fluorene (3rd internal standard)						
			Pentachlorophenol (4th internal standard)						
			Bis(2-ethylhexyl)phthalate (5th internal standard)						
			Benzo(a)pyrene (6th internal standard)						

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25550E26

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270C)

The percent difference (%D) of the initial calibration average Relative Response Factors (RRFs) and the continuing calibration RRFs were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. RRF - RRF)/ave. RRF
$RRF = (A_x)(C_{is})/(A_{is})(C_x)$

Where: ave. RRF = initial calibration average RRF
RRF = continuing calibration RRF
A_x = Area of compound, A_{is} = Area of associated internal standard
C_x = Concentration of compound, C_{is} = Concentration of internal standard

#	Standard ID	Calibration Date	Compound (Reference Internal Standard)	Average RRF (initial)	Reported RRF (CC)	Recalculated RRF (CC)	Reported %D	Recalculated %D
1	ccv 18:17	1/10/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.096	1.081	1.081	1	1
			Fluorene (3rd internal standard)	1.319	1.299	1.299	2	2
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.140	1.177	1.177	3	3
			~~Bis(2-ethylhexyl)phthalate~~ Chrysene (5th internal standard)	1.216	1.167	1.167	4	4
			Benzo(a)pyrene (6th internal standard)	1.137	1.143	1.143	1	1
2	ccv 6:54	1/12/11	~~Phenol (1st internal standard)~~					
			Naphthalene (2nd internal standard)	1.085	1.065	1.065	2	2
			Fluorene (3rd internal standard)	1.315	1.221	1.221	7	7
			~~Pentachlorophenol~~ Anthracene (4th internal standard)	1.131	1.121	1.121	1	1
			Bis(2-ethylhexyl)phthalate Chrysene (5th internal standard)	1.175	1.157	1.157	2	2
			Benzo(a)pyrene (6th internal standard)	1.128	1.146	1.146	2	2
3			Phenol (1st internal standard)					
			Naphthalene (2nd internal standard)					
			Fluorene (3rd internal standard)					
			Pentachlorophenol (4th internal standard)					
			Bis(2-ethylhexyl)phthalate (5th internal standard)					
			Benzo(a)pyrene (6th internal standard)					

Comments: Refer to Continuing Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25550E8b

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer:

METHOD: GC/MS Semivolatiles (EPA SW 846 Method 8270)

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: 4

	Surrogate Spiked	Surrogate Found	Percent Recovery Reported	Percent Recovery Recalculated	Percent Difference
Nitrobenzene-d5	1.0	0.954	95	95	0
2-Fluorobiphenyl	↓	0.873	87	87	↓
Terphenyl-d14	↓	1.194	119	119	↓
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 #: 25550E8D

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

The percent recoveries (%R) and Relative Percent Difference (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100 * (SSC - SC)/SA Where: SSC = Spiked sample concentration; SA = Spike added; SC = Sample concentation

RPD = 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											
N-Nitroso-di-n-propylamine											
4-Chloro-3-methylphenol											
Acenaphthene	41.15	41.15	ND	39.90	39.57	97	97	96	96	1	1
Pentachlorophenol											
Pyrene	↓	↓	2.09	38.03	40.0	87	87	92	92	6	6

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 #: 25550E06

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicates Results Verification

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

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										
N-Nitroso-di-n-propylamine										
4-Chloro-3-methylphenol										
Acenaphthene	33.33	NA	30.98	NA	93	93				
Pentachlorophenol										
Pyrene	↓	↓	31.92	↓	96	96	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25550E0b

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: FT
2nd reviewer:

METHOD: GC/MS BNA (EPA SW 846 Method 8270)

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds agree within 10.0% of the reported results?

Concentration = $\frac{(A_x)(I_s)(V_t)(DF)(2.0)}{(A_{is})(RRF)(V_o)(V_i)(\%S)}$

A_x	=	Area of the characteristic ion (EICP) for the compound to be measured
A_{is}	=	Area of the characteristic ion (EICP) for the specific internal standard
I_s	=	Amount of internal standard added in nanograms (ng)
V_o	=	Volume or weight of sample extract in milliliters (ml) or grams (g).
V_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(b) fluoranthene

Conc. = $\frac{(14745)(1.0)(1000)(\quad)(\quad)(\quad)}{(148031)(1.162)(30)(0.822)(\quad)}$

= 35 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: December 20, 2010

LDC Report Date: June 9, 2011

Matrix: Sediment

Parameters: Chlorinated Pesticides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5MSD

Introduction

This data review covers 9 sediment 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 with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
1/22/11	CCV	RTXCLP2	4,4'-DDT	49.7	SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	A
1/22/11	CCV	RTXCLP1	4,4'-DDT	60.1	SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects)	A
1/22/11	CCV	RTXCLP2	Toxaphene	33.5	SED-007-SIV-SD-0.0-0.6	J (all detects) UJ (all non-detects)	A
1/22/11	CCV	RTXCLP1	Toxaphene	55.5	SED-007-SIV-SD-0.0-0.6	J (all detects) UJ (all non-detects)	A

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
1/24/11	CCV	RTXCLP1	4,4'-DDE 4,4'-DDT	22.7 38.3	SED-037-SIV-SD-0.0-0.5	J (all detects) UJ (all non-detects) J (all detects) UJ (all non-detects)	A
1/24/11	CCV	RTXCLP2	4,4'-DDT	31.1	SED-037-SIV-SD-0.0-0.5	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.

The individual 4,4'-DDT and Endrin breakdowns (%BD) were less than or equal to 15.0% with the following exceptions:

Date	Standard ID	Column	Compound	%BD	Associated Samples	Flag	A or P
1/22/11	PEM	RTXCLP1	4,4'-DDT	17.7	SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5	J (all detects)	A

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
SED-003-SIV-SD-0.0-0.5	RTXCLP2	Decachlorobiphenyl	270 (20-120)	All TCL compounds except 4,4'-DDT	J (all detects)	A
SED-005-SIV-SD-0.0-0.5	RTXCLP1	Tetrachloro-m-xylene	43 (50-130)	All TCL compounds	J (all detects) UJ (all non-detects)	A
SED-008-SIV-SD-0.0-0.5	RTXCLP2	Tetrachloro-m-xylene Decachlorobiphenyl	15 (50-130) 0 (20-120)	All TCL compounds except 4,4'-DDT	J (all detects) R (all non-detects)	A

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SED-034-SIV-SD-0.0-0.5	RTXCLP2	Tetrachloro-m-xylene Decachlorobiphenyl	20 (50-130) 8 (20-180)	All TCL compounds	J (all detects) R (all non-detects)	A
SED-037-SIV-SD-0.0-0.5	RTXCLP2	Decachlorobiphenyl	348 (20-120)	All TCL compounds except 4,4'-DDT 4,4'-DDE	J (all detects)	A

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
SED-005-SIV-SD-0.0-0.5MS/MSD (SED-005-SIV-SD-0.0-0.5)	4,4'-DDE 4,4'-DDD Endosulfan II Endrin aldehyde 4,4'-DDT	188 (18-161) - - - -	240 (18-161) - - - 186 (10-176)	- 55 (≤50) 51 (≤50) 63 (≤35) -	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A

VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	Flag	A or P
LCS (All samples in SDG DE046)	Heptachlor epoxide	136 (65-131)	J (all detects)	P

IX. Regional Quality Assurance and Quality Control

Not applicable.

X. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

XI. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Endrin aldehyde	0.27	0.42U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Heptachlor epoxide	0.078	0.21U	200 (≤50)	J (all detects) UJ (all non-detects)	A
Mirex	0.095	0.42U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Chlorinated Pesticides - Data Qualification Summary - SDG DE046

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE046	SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5	4,4'-DDT	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE046	SED-007-SIV-SD-0.0-0.6	Toxaphene	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE046	SED-037-SIV-SD-0.0-0.5	4,4'-DDE 4,4'-DDT	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE046	SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5	4,4'-DDT	J (all detects)	A	Continuing calibration (PEM %D) (M)
DE046	SED-003-SIV-SD-0.0-0.5	All TCL compounds except 4,4'-DDT	J (all detects)	A	Surrogate spikes (%R) (S)
DE046	SED-005-SIV-SD-0.0-0.5	All TCL compounds	J (all detects) UJ (all non-detects)	A	Surrogate spikes (%R) (S)
DE046	SED-008-SIV-SD-0.0-0.5	All TCL compounds except 4,4'-DDT	J (all detects) R (all non-detects)	A	Surrogate spikes (%R) (S)
DE046	SED-034-SIV-SD-0.0-0.5	All TCL compounds	J (all detects) R (all non-detects)	A	Surrogate spikes (%R) (S)
DE046	SED-037-SIV-SD-0.0-0.5	All TCL compounds except 4,4'-DDT 4,4'-DDE	J (all detects)	A	Surrogate spikes (%R) (S)
DE046	SED-005-SIV-SD-0.0-0.5	4,4'-DDE 4,4'-DDT	J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE046	SED-005-SIV-SD-0.0-0.5	4,4'-DDD Endosulfan II Endrin aldehyde	J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (RPD) (Q)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Heptachlor epoxide	J (all detects)	P	Laboratory control samples (%R)(L)
DE046	DUP01-SIV-QC-122010	Mirex	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE046	SED-003-SIV-SD-0.0-0.5	gamma-BHC Endrin	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE046	SED-007-SIV-SD-0.0-0.6	gamma-BHC	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE046	SED-037-SIV-SD-0.0-0.5	4,4'-DDT	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE046	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5	4,4'-DDE 4,4'-DDT Endrin aldehyde Heptachlor epoxide Mirex	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Chlorinated Pesticides - Laboratory Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Chlorinated Pesticides - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E3a

SDG #: DE046

Laboratory: Lancaster Laboratories

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 6/3/11

Page: 1 of 1

Reviewer: [illegible]

2nd Reviewer: [illegible]

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: 12/20/10
II.	GC/ECD Instrument Performance Check	SW	per cov
III.	Initial calibration	A	%RSD ≤ 20, r²
IV.	Continuing calibration/ICV	SW	ICV/CCV SW
V.	Blanks A	SW	
VI.	Surrogate spikes	SW	
VII.	Matrix spike/Matrix spike duplicates	SW	
VIII.	Laboratory control samples	SW	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	SW	D = 1, & 3
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: sediments

1†	DUP01-SIV-QC-122010	11	PBLK18363	21		31	
2†	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5	13		23		33	
4†	SED-007-SIV-SD-0.0-0.6	14		24		34	
5†	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7†	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5MSD	19		29		39	
10		20		30		40	

Notes:

LDC #: 25550E3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

Reviewer: PT
2nd Reviewer: A

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) $\leq$ 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 $\leq$ 15%.0 for individual breakdown in the Evaluation mix standards?		✓		
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) $\leq$ ~~15%.0~~ 20 or percent recovieries 85-115%?		✓		
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?			✓	

LDC #: 35550E3a
SDG #: see cover

VALIDATION FINDINGS CHECKLIST

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

Validation Area	Yes	No	NA	Findings/Comments
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?		✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?		✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	
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.
B. beta-BHC	J. 4,4'-DDE	R. Endrin aldehyde	Z. Aroclor-1248	HH.
C. delta-BHC	K. Endrin	S. alpha-Chlordane	AA. Aroclor-1254	II.
D. gamma-BHC	L. Endosulfan II	T. gamma-Chlordane	BB. Aroclor-1260	JJ.
E. Heptachlor	M. 4,4'-DDD	U. Toxaphene	CC. DB 608	KK.
F. Aldrin	N. Endosulfan sulfate	V. Aroclor-1016	DD. DB 1701	LL.
G. Heptachlor epoxide	O. 4,4'-DDT	W. Aroclor-1221	EE.	MM.
H. Endosulfan I	P. Methoxychlor	X. Aroclor-1232	FF.	NN.

Notes:_____

LDC #: 25550F3a

VALIDATION FINDINGS WORKSHEET
Continuing Calibration

Page: 1 of 1
Reviewer: FT

METHOD: ✓ GC ___ HPLC

2nd Reviewer: ✓

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".
What type of continuing calibration calculation was performed? ___%D or ___RPD
Y N N/A Were continuing calibration standards analyzed at the required frequencies?
Y N N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤15.0%?
Level IV Only
Y N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ ~~15.0~~ 20)	RT (limit)	Associated Samples	Qualifications
	1/22/11	CCV	RTX CLP2	Θ	49.7	( )	4, 5	J/UJ/A (C)
	18:34		RTX CLP1	Θ	60.1	( )		
						( )		
						( )		
	1/22/11	CCV	RTX CLP2	U	33.5	( )	4	J/UJ/A
	~~18:39~~		RTX CLP1	U	55.5	( )		(C)
	19:04					( )		
						( )		
						( )		
						( )		
	1/24/11	CCV	RTX CLP1	J	22.7	( )	7	J/UJ/A (C)
	22:30			Θ	38.3	( )	↓	↓
			RTX CLP2	Θ	31.1	( )	↓	↓
						( )		
						( )		
						( )		
	1/22/11	PEM	RTX CLP1	Θ	17.7 (≤15)	( )	4, 5	J/A Det (M)
	18:19					( )		QUAL Θ only
						( )		
						( )		
						( )		
						( )		
						( )		
						( )		

LDC #: 25505E3c

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC ___ HPLC

Are surrogates required by the method? Yes___ or No___.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

(S)

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2	RTX CLP2	o	270 (20-120)	J/A det qual all except o
	3	RTX CLP1	Y	43 (50-130)	J/UJ/A all
	5	RTX CLP2	Y	15 (50-130)	J/R/A qual all except o
			o	0 (20-120)	
	6	RTX CLP2	Y	20 (50-130)	J/R/A all
			o	8 (20-~~120~~ 120)	
	7	RTX CLP2	o	348 (20-~~120~~ 120)	J/A det qual all except J o

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25550E3a

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG?

[✓ Y] N N/A Was an MS/MSD analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

Y [✓ N] N/A Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within QC limits?

(Q)

#	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	8+9	J	188 (18-161)	240 (18-161)	( )	3	J/A det
		M	( )	( )	55 (50)	↓	J/A det
		L	( )	( )	51 (50)	↓	↓
		R	( )	( )	63 (35)	↓	↓
		O	( )	186 (10-176)	( )	↓	↓
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 35550E3a

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples (LCS)

Page: 1 of 1
Reviewer: FT
2nd Reviewer:

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

[✓ Y] N N/A Were a 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?

(2)

#	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
	LCS	G	136 (65-131)	( )	( )	all	J/Pdet
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
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			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		
			( )	( )	( )		

LDC #: 25502E39

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: FT
2nd Reviewer: 2

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD Bet 2 column Finding ≤40	Associated Samples	Qualifications
	Mirex	64.14	1	J/A det * X111
	D	91.29	2	↓
	K	116.68		
	D	88.97	4	↓
	θ	47.59	7	↓

Comments: See sample calculation verification worksheet for recalculations

LDC#: 25550E3a

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: Pesticides Method 8081A

Y N NA Were field duplicate pairs identified in this SDG?
Y N NA Were target analytes detected in the field duplicate pairs?

FD

Compound	Concentration (ug/Kg)		≤50	
	1	3	RPD	
J	0.71	0.53U	200	J/UJ/A
O	0.86	0.83U	200	
R	0.27	0.47 0.19U	200	
G	0.078	0.21 0.10U	200	
Mirex	0.095	0.47 0.10U	200	

V:\FIELD DUPLICATES\templates\25550E3a.wpd

LDC #: 25550E3
SDG #: all cases

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: JMG
2nd Reviewer: CA

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10/100 std)	Recalculated CF (10/10std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/13/11	4,4'-DDT RFXCLP1	3.42×10^3	3.42×10^3	3.47×10^3	3.47×10^3	3.3	3.3
			Methoxychlor	2.08×10^3	2.08×10^3	2.14×10^3	2.14×10^3	8.6	8.6
			RFXCLP2	2.47×10^3	2.47×10^3	2.58×10^3	2.58×10^3	6.1	6.1
2			↓	1.24×10^3	1.24×10^3	1.25×10^3	1.25×10^3	4.9	4.9
3	ICAL	1/14/11	↓	3.45×10^3	3.45×10^3	3.70×10^3	3.70×10^3	5.7	5.7
			↓	1.58×10^3	1.58×10^3	1.63×10^3	1.63×10^3	10.2	10.2
			↓	1.79×10^3	1.79×10^3	1.83×10^3	1.83×10^3	2.6	2.6
4			↓	7.35×10^2	7.35×10^2	7.68×10^2	7.68×10^2	5.6	5.6

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 #: 25580E39
SDG #: see cover

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (10/10 std)	Recalculated CF (10/10 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/21/11	4,4-DDT RTXclp1	3.13×10^3	3.13×10^3	3.38×10^3	3.38×10^3	13.1	13.1
			Methoxychlor ↓	1.34×10^3	1.34×10^3	1.46×10^3	1.46×10^3	15.8	15.8
			↓ RTXclp2	1.12×10^3	1.12×10^3	1.15×10^3	1.15×10^3	2.9	2.9
2			↓	5.31×10^2	5.31×10^2	5.54×10^2	5.54×10^2	6.2	6.2
3	ICAL	1/24/11	↓	3.10×10^3	3.10×10^3	3.36×10^3	3.36×10^3	17.6	17.6
				1.30×10^3	1.30×10^3	1.42×10^3	1.42×10^3	19.4	19.4
			↓	1.14×10^3	1.14×10^3	1.16×10^3	1.16×10^3	2.6	2.6
4			↓	5.32×10^2	5.32×10^2	5.43×10^2	5.43×10^2	6.9	6.9

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.

INICIO TSB

LDC #: 25550E3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Page: 1 of 1
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 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	~~VGA~~ CCV	1/14/11	4,4-DDT RTX CLP1	20.0	19.90	19.90	0.5	0.5
			methoxychlor	100.0	95.72	95.72	4.3	4.3
			RTX CLP2	↓	19.54	19.54	2.3	2.3
2			↓	↓	98.90	98.90	1.1	1.1
3	CCV 18:34	1/22/11	4,4'-DDT RTX CLP2	19.99	10.06	10.6	49.7	49.7
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 #: 25530E59
SDG #: su cover

VALIDATION FINDINGS WORKSHEET

Surrogate Results Verification

Page: 1 of 1
Reviewer:
2nd reviewer:

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:

Surrogate	Column	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
Tetrachloro-m-xylene						
Tetrachloro-m-xylene			0.77927	75	75	0
Decachlorobiphenyl	RTX CLP2	1.04	0.853445	82	82	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 #: 25350E3a
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Reviewer: 1
2nd Reviewer: 1

METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

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 = Concentration

RPD = | MS - MSD | * 2/(MS + MSD)

MS = Matrix spike percent recovery
MSD = Matrix spike duplicate percent recovery

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
gamma-BHC	0.33	0.33	ND	0.19	0.28	58	58	85	85	38	38
4,4'-DDT	0.65	0.65	ND	0.84	1.21	129	129	186	186	36	36

Comments: Refer ot 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 #: 25550E39
SDG #: per cover

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate 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 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: WBS

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	NA	0.29	NA	88	88				
4,4'-DDT	0.65	↓	0.55	↓	85	85	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25550E3S
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd reviewer: [illegible]

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. #1 4,4'-PDT

$$\text{Conc.} = \frac{(18807)(10)(0.4)}{(1.83 \times 10^3)(60)(0.792)}$$

=

0.86 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: December 20, 2010

LDC Report Date: June 21, 2011

Matrix: Sediment

Parameters: Polychlorinated Biphenyls

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5MSD

Introduction

This data review covers 9 sediment 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 with the following exceptions:

Sample	Column	Surrogate	%R (Limits)	Compound	Flag	A or P
SED-005-SIV-SD-0.0-0.5	Not specified	Decachlorobiphenyl	134 (45-120)	All TCL compounds	J (all detects)	A
SED-034-SIV-SD-0.0-0.5	Not specified	Decachlorobiphenyl	157 (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)	Affected Compound	Flag	A or P
LCS/D (All samples in SDG DE046)	Aroclor-5442	69 (75-125)	53 (75-125)	Aroclor-5432 Aroclor-5442 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
SED-007-SIV-SD-0.0-0.6	PCB-1254	123.34	J (all detects)	A
SED-034-SIV-SD-0.0-0.5	PCB-1254 PCB-1260	99.70 62.74	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 DE046	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 DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 were identified as field duplicates. No polychlorinated biphenyls was detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Aroclor 5460	4.2U	8.0	200 (≤50)	J (all detects) UJ (all non-detects)	A
PCB-1254	2.1U	12	200 (≤50)	J (all detects) UJ (all non-detects)	A
PCB-1260	2.1U	4.2	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Data Qualification Summary - SDG DE046

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE046	SED-005-SIV-SD-0.0-0.5	All TCL compounds	J (all detects)	A	Surrogate spikes (%R) (S)
DE046	SED-034-SIV-SD-0.0-0.5	All TCL compounds	J (all detects)	P	Surrogate spikes (%R) (S)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Aroclor-5432 Aroclor-5442 Aroclor-5460	J (all detects) UJ (all non-detects)	P	Laboratory control samples (%R)(L)
DE046	SED-007-SIV-SD-0.0-0.6	PCB-1254	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE046	SED-034-SIV-SD-0.0-0.5	PCB-1254 PCB-1260	J (all detects) J (all detects)	A	Compound quantitation and CRQLs (RPD) (*XIII)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE046	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5	Aroclor 5460 PCB-1254 PCB-1260	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Laboratory Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Polychlorinated Biphenyls - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E3b

VALIDATION COMPLETENESS WORKSHEET

Level IV

Date: 6/3/11

SDG #: DE046

Page: 1 of 1

Laboratory: Lancaster Laboratories

Reviewer: [illegible]

2nd Reviewer: [illegible]

METHOD: GC Polychlorinated Biphenyls (EPA SW 846 Method 8082)

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

	Validation Area		Comments
I.	Technical holding times	A	Sampling dates: 12/20/10
II.	GC/ECD Instrument Performance Check	N	
III.	Initial calibration	A	%D ≤ 20
IV.	Continuing calibration/ICV	A	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	SW	D = 1,3
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:

Sediments

1	DUP01-SIV-QC-122010 D	11	PBLK35356	21		31	
2	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5 D	13		23		33	
4	SED-007-SIV-SD-0.0-0.6	14		24		34	
5	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5MSD	19		29		39	
10		20		30		40	

Notes: _____

LDC #: 25550E 3b
SDG #: per cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: [illegible]

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?		✓		
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?			✓	
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?	✓			
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?		✓		
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?		✓		
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓			
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓	✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 35530E3b
SDG #: all cont

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

LDC #: 25505E3b

VALIDATION FINDINDS WORKSHEET
Surrogate Recovery

Page: 1 of 1
Reviewer: FT
2nd Reviewer: A

METHOD: __ GC __ HPLC

Are surrogates required by the method? Yes____ or No____.

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Were surrogates spiked into all samples and blanks?

Y N N/A Did all surrogate recoveries (%R) meet the QC limits?

#	Sample ID	Detector/ Column	Surrogate Compound	%R (Limits)	Qualifications
	2		O	122 (45-120)	no qual 5X DL
				( )	
	3		O	134 (45-120)	J/+ dut
				( )	
	6		↓	157 (45-120)	J/+ dut
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	
				( )	

	Surrogate Compound		Surrogate Compound		Surrogate Compound		Surrogate Compound		
A	Chlorobenzene (CBZ)	G	Octacosane	M	Benzo(e)Pyrene	S	1-Chloro-3-Nitrobenzene	Y	Tetrachloro-m- xylene
B	4-Bromofluorobenzene (BFB)	H	Ortho-Terphenyl	N	Terphenyl-D14	T	3,4-Dinitrotoluene		
C	a,a,a-Trifluorotoluene	I	Fluorobenzene (FBZ)	O	Decachlorobiphenyl (DCB)	U	Tripentyltin		
D	Bromochlorobenene	J	n-Triacontane	P	1-methylnaphthalene	V	Tri-n-propyltin		
E	1,4-Dichlorobutane	K	Hexacosane	Q	Dichlorophenyl Acetic Acid (DCAA)	W	Tributyl Phosphate		
F	1,4-Difluorobenzene (DFB)	L	Bromobenzene	R	4-Nitrophenol	X	Triphenyl Phosphate		

LDC #: 25550E36
SDG #: -
METHOD: GC Pesticides/PCBs (EPA SW 846 Method 8081/8082)

VALIDATION FINDINGS WORKSHEET
Laboratory Control Samples

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

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 a LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	LCSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		LCS/D	**	69 (75-125)	53 (75-125)	( )	All	J/UJ/P
				( )	( )	( )		(Qual Aroclor/ 5432
				( )	( )	( )		5442
				( )	( )	( )		5446
				( )	( )	( )		
		** Aroclor	5442	( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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LDC #: 25550 E3 h

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Page: 1 of 1
Reviewer: FT
2nd Reviewer: e

METHOD: ✓ **GC** __ **HPLC**

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	% RPD But ≥ column Finding ≤ 40	Associated Samples	Qualifications
	AA	123.34	4	J/A det
	AA = PCB-1254			
	BB = PCB-1260			
	AA	99.70	6	↓
	BB	62.74	↓	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25550E3b

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC ___ HPLC
Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ng/kg)		%RPD Limit 50	Qualification Parent only / All Samples
	1	3		
Aroclor 5460	4.2 ~~1.3~~ U	8.0	200	J/UJ/A
AA	2.1 ~~0.42~~ U	12	↓	↓
BB	2.1 ~~0.42~~ U	4.2	↓	↓
AA = PCB 1254				
BB = PCB 1260				

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 25550E 3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

#	Standard ID	Calibration Date	Compound	Reported CF (200 std)	Recalculated CF (200 std)	Reported Average CF (initial)	Recalculated Average CF (initial)	Reported %RSD	Recalculated %RSD
1	ICAL	12/28/10	Aroclor 1260-1 ZBR1	70	70	68	68	6.8	6.8
			↓ ZBR2	170	170	164	164	5.7	5.7
2	ICAL	1/5/11	↓	57	57	62	62	6.9	6.9
			↓	132	132	150	150	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 #: 35520E 3b
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer: [illegible]

METHOD: GC_____HPLC_____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 9:54	12/31/10	Aroclor 1260 ZBR1	200	186.38	186.38	6.8	6.8
			↓ ZBR2	200	199.52	199.52	0.2	0.2
2	ccv ~~10:15~~	12/31/10	↓	200	233.86	233.86	16.9	16.9
	17:44		↓	200	236.54	236.54	18.3	18.3
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 #: 45505E35
SDG #: see cover
METHOD: ✓ GC __ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: C

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	
TCMX	ZB R2	1.041	~~1.0302~~ 1.0503	98	98	0
DCB	↓		1.130254	108	109	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 #: 25350 (29)
SDG #: pw comer

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: FZ
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 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.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)											
Dinoseb (8151)											
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											
PCB-1260	16.67	16.67	3.36	28.06	26.05	148	148	136	136	7	7

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 #: 25550E3b
SDG #: all cases

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Page: 1 of 1
Reviewer: EJ
2nd Reviewer: C

METHOD: __ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = I LCS - LCSD I * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
SC = Concentration
LCS = Laboratory control sample percent recovery
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: 20

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)										
Dinoseb (8151)										
Naphthalene (8310)										
Anthracene (8310)										
HMX (8330)										
2,4,6-Trinitrotoluene (8330)										
PCB 1260	16.67	NA	20.68	NA	124	124	NA			

Comments: Refer to Laboratory Control Sample/Laboratory Control Sample Duplicate findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25550E 3b
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

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

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= (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. #2 Compound Name Aroclor 1260

Concentration = (final) 33 / 0.739

= 45 ug/kg

#	Sample ID	Compound	Reported Concentrations	Recalculated Results Concentrations	Qualifications
	Aroclor 1260-4 =	6027.437012 (~~66~~ 2000) / (59)(60)(1000)	(5) = 17.027		
	1260-4	= 17.027			
	-5	= 57.129			
	-6	= 25.284			
		Ave = 33			

Comments: [illegible]

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 20, 2010

LDC Report Date: June 8, 2011

Matrix: Sediment

Parameters: Metals

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5MSD
SED-005-SIV-SD-0.0-0.5DUP

Introduction

This data review covers 10 sediment 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, Molybdenum, Mercury, Nickel, Phosphorus, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, and Zirconium.

This review follows the Quality Assurance Project Plan for Santa Susana Field Laboratory (SSFL), RCRA Facility Investigation, Surficial Media Operable Unit (March 2009, Revision 4) and a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Data Review (January 2010).

A qualification summary table is provided at the end of this report if data has been qualified. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

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 Phosphorus Tin	0.091 mg/Kg 1.732 mg/Kg 1.325 mg/Kg	All samples in SDG DE046
ICB/CCB	Antimony Beryllium Titanium	0.56 ug/L 0.059 ug/L 0.45 ug/L	All samples in SDG DE046
ICB/CCB	Magnesium	38.6 ug/L	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5
ICB/CCB	Magnesium	42.1 ug/L	SED-003-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5

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
DUP01-SIV-QC-122010	Antimony Tin	0.13 mg/Kg 2.2 mg/Kg	0.13U mg/Kg 2.2U mg/Kg
SED-003-SIV-SD-0.0-0.5	Antimony Tin	0.10 mg/Kg 2.3 mg/Kg	0.10U mg/Kg 2.3U mg/Kg
SED-005-SIV-SD-0.0-0.5	Antimony Tin	0.17 mg/Kg 2.3 mg/Kg	0.17U mg/Kg 2.3U mg/Kg
SED-007-SIV-SD-0.0-0.6	Antimony Tin	0.14 mg/Kg 2.4 mg/Kg	0.14U mg/Kg 2.4U mg/Kg
SED-008-SIV-SD-0.0-0.5	Antimony Tin	0.11 mg/Kg 2.9 mg/Kg	0.11U mg/Kg 2.9U mg/Kg
SED-034-SIV-SD-0.0-0.5	Tin	2.6 mg/Kg	2.6U mg/Kg
SED-037-SIV-SD-0.0-0.5	Antimony Tin	0.25 mg/Kg 3.4 mg/Kg	0.25U mg/Kg 3.4U 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.

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
SED-005-SIV-SD-0.0-0.5MS/MSD (All samples in SDG DE046)	Antimony	40 (75-125)	45 (75-125)	-	J (all detects) UJ (all non-detects)	A
SED-005-SIV-SD-0.0-0.5MS/MSD (All samples in SDG DE046)	Arsenic Cadmium Molybdenum Nickel Thallium Vanadium	- 129 (75-125) 133 (75-125) 130 (75-125) 129 (75-125) -	135 (75-125) 126 (75-125) 135 (75-125) 141 (75-125) - 132 (75-125)	- - - - - -	J (all detects) J (all detects) 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
SED-005-SIV-SD-0.0-0.5DUP (All samples in SDG DE046)	Arsenic	43 (≤20)	-	J (all detects) UJ (all non-detects)	A
	Barium	38 (≤20)	-		
	Chromium	45 (≤20)	-		
	Cobalt	36 (≤20)	-		
	Copper	34 (≤20)	-		
	Lead	26 (≤20)	-		
	Molybdenum	-	0.2846 mg/Kg (≤0.240)		
	Nickel	46 (≤20)	-		
	Vanadium	36 (≤20)	-		
	Zinc	37 (≤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
SED-005-SIV-SD-0.0-0.5	Barium	16 (≤10)	All samples in SDG DE046	J (all detects) UJ (all non-detects)	A
	Lead	18 (≤10)			
	Lithium	13 (≤10)			
	Nickel	21 (≤10)			
	Strontium	12 (≤10)			
	Vanadium	12 (≤10)			
	Zinc	17 (≤10)			

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 DE046	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 DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 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
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Aluminum	15100	15200	1 (≤50)	-	-
Antimony	0.13	0.17	27 (≤50)	-	-
Arsenic	5.3	5.6	6 (≤50)	-	-
Barium	122	113	8 (≤50)	-	-
Beryllium	0.65	0.65	0 (≤50)	-	-
Boron	5.0	4.1	20 (≤50)	-	-
Cadmium	0.27	0.22	20 (≤50)	-	-
Calcium	2620	2560	2 (≤50)	-	-
Chromium	21.4	25.3	17 (≤50)	-	-
Cobalt	6.7	7.0	4 (≤50)	-	-
Copper	10.4	11.0	6 (≤50)	-	-
Iron	18600	19200	3 (≤50)	-	-
Lead	18.4	16.5	11 (≤50)	-	-

Analyte	Concentration (mg/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Lithium	22.7	22.6	0 (≤50)	-	-
Magnesium	4410	4420	0 (≤50)	-	-
Manganese	287	287	0 (≤50)	-	-
Mercury	0.029	0.031	7 (≤50)	-	-
Molybdenum	0.75	0.82	9 (≤50)	-	-
Nickel	16.3	17.6	8 (≤50)	-	-
Phosphorus	462	451	2 (≤50)	-	-
Potassium	3130	3360	7 (≤50)	-	-
Selenium	0.18	0.20	11 (≤50)	-	-
Silver	0.073	0.049	39 (≤50)	-	-
Sodium	75.0	75.7	1 (≤50)	-	-
Strontium	16.2	15.8	2 (≤50)	-	-
Thallium	0.37	0.36	3 (≤50)	-	-
Tin	2.2	2.3	4 (≤50)	-	-
Titanium	1090	1140	4 (≤50)	-	-
Vanadium	40.6	43.7	7 (≤50)	-	-
Zinc	84.6	82.4	3 (≤50)	-	-
Zirconium	1.2	6.0U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Metals - Data Qualification Summary - SDG DE046

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Antimony	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Arsenic Cadmium Molybdenum Nickel Thallium Vanadium	J (all detects) J (all detects) J (all detects) J (all detects) J (all detects) J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Arsenic Barium Chromium Cobalt Copper Lead Nickel Vanadium Zinc	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (RPD) (E)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Molybdenum	J (all detects) UJ (all non-detects)	A	Duplicate sample analysis (Difference) (E)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Barium Lead Lithium Nickel Strontium Vanadium Zinc	J (all detects) UJ (all non-detects)	A	ICP serial dilution (%D) (A)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	All analytes reported below the RL and above the MDL.	J (all detects)	A	Sample result verification (Z)
DE046	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5	Zirconium	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Metals - Laboratory Blank Data Qualification Summary - SDG DE046

SDG	Sample	Analyte	Modified Final Concentration	A or P	Code
DE046	DUP01-SIV-QC-122010	Antimony Tin	0.13U mg/Kg 2.2U mg/Kg	A	B
DE046	SED-003-SIV-SD-0.0-0.5	Antimony Tin	0.10U mg/Kg 2.3U mg/Kg	A	B
DE046	SED-005-SIV-SD-0.0-0.5	Antimony Tin	0.17U mg/Kg 2.3U mg/Kg	A	B
DE046	SED-007-SIV-SD-0.0-0.6	Antimony Tin	0.14U mg/Kg 2.4U mg/Kg	A	B
DE046	SED-008-SIV-SD-0.0-0.5	Antimony Tin	0.11U mg/Kg 2.9U mg/Kg	A	B
DE046	SED-034-SIV-SD-0.0-0.5	Tin	2.6U mg/Kg	A	B
DE046	SED-037-SIV-SD-0.0-0.5	Antimony Tin	0.25U mg/Kg 3.4U mg/Kg	A	B

Santa Susana Field Laboratory
Metals - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/3/11

SDG #: DE046 Level IV Page: 1 of 1

Laboratory: Lancaster Laboratories Reviewer: SC

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: 12/20/10
II.	ICP/MS Tune	A	
III.	Calibration	A	
IV.	Blanks	SW	
V.	ICP Interference Check Sample (ICS) Analysis	SW	
VI.	Matrix Spike Analysis	SW	MS/D
VII.	Duplicate Sample Analysis	SW	DUP
VIII.	Laboratory Control Samples (LCS)	A	LCS
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	SW	(1,3)
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: sediment

1	DUP01-SIV-QC-122010	11		21		31	
2	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5	13		23		33	
4	SED-007-SIV-SD-0.0-0.6	14		24		34	
5	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5MSD	19		29		39	
10	SED-005-SIV-SD-0.0-0.5DUP	20		30		40	

Notes: _____

LDC #: 25550E4

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: CR
2nd Reviewer: L

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 #: 25550E4

VALIDATION FINDINGS CHECKLIST

Reviewer: eE
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 #: 25550E4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer: [signature]

All circled elements are applicable to each sample.

Sample ID	Matrix	Target Analyte List (TAL)
1-7		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-8-10		Al, Sb, As, Ba, Be, B, Cd, Ca, ~~Cr, Co, Cu, Fe, Pb, Li, Mg~~, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr

Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, ~~Cd, Cr, Co~~, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25550E4

VALIDATION FINDINGS WORKSHEET
PB/ICB/CCB QUALIFIED SAMPLES

Reviewer: ar
2nd Reviewer: C

METHOD: Trace metals (EPA SW 864 Method 6010B/6020/7000) Soil preparation factor applied: ICP-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			
Sb			0.56	0.56	0.13	0.10	0.17	0.14	0.11		0.25			
Be			0.059	0.06										
Cu	0.091			0.455										
P	1.732			8.66										
Sn	1.325			6.625	2.2	2.3	2.3	2.4	2.9	2.6	3.4			
Ti			0.45	0.225										

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 Qualifiers (>5x)									
Mg			38.6	19.3										

Sample Concentration units, unless otherwise noted: mg/Kg Associated Samples: 2, 4-7

Analyte	Maximum PB[a] (mg/Kg)	Maximum PB[a] (ug/L)	Maximum ICB/CCB[a] (ug/L)	Action Limit	No Qualifiers (>5x)									
Mg			42.1	21.05										

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 #: 25550E4

VALIDATION FINDINGS WORKSHEET
ICP Interference Check Sample

Reviewer: AR
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	Finding	Associated Samples	Qualifications
1	12/30/10	ICSA (05:00)	Mn	4 ug/L (≤0.78)	None	No Qual (all < 90% ICSA)
2	12/30/10	ICSA (06:25)	Mn	4 ug/L	↓	↓

Comments:

LDC #: 25550E4

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Reviewer: CR
2nd Reviewer: [illegible]

METHOD: Trace metals (EPA SW 846 Method 6010/6020/7000)

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Y N N/A Was a matrix spike analyzed for each matrix in this SDG?

Y (N) N/A Were matrix spike percent recoveries (%R) within the control limits of 75-125? If the sample concentration exceeded the spike concentration by a factor of 4 or more, no action was taken.

(Y) N N/A Were all duplicate sample relative percent differences (RPD) ≤ 20% for water samples and ≤35% for soil samples?

LEVEL IV ONLY:

(Y) N N/A Were recalculated results acceptable? See Level IV Recalculation Worksheet for recalculations.

#	MS/MSD ID	Matrix	Analyte	MS %Recovery	MSD %Recovery	RPD (Limits)	Associated Samples	Qualifications
	8/9	S	Sb	40	45		All	J/UJ/A (Q)
			As		135			Jdet/A
			Cd	129	126			
			Mo	133	135			
			Ni	130	141			
			Tl	129				
			V		132			

Comments: _____

LDC #: 25550E4

VALIDATION FINDINGS WORKSHEET
Duplicate Analysis

Page: 1 of 1
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 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
		10	S	As	43		All	J/UJ/A (E)
				Ba	38			
				Be	45			
				Co	36			
				Cu	34			
				Pb	26			
				Mo		0.2846 (≤0.24)		
				Ni	46			
				V	36			
				Zn	37			

Comments:

LDC #: 25550E4

VALIDATION FINDINGS WORKSHEET
ICP Serial Dilution

Page: 1 of 1
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 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
		3	S	Ba	16	A 11	J (W) (A) (A)
			S	Pb	18		
				Li	13		
				Mn	21		
				Sr	17		
				V	12		
				Zn	17		

Comments:

SDILICPMS.wpd

LDC#: 25550E4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

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

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

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)		(≤50) RPD	Qualifications (Parent Only)
	1	3		
Aluminum	15100	15200	1	
Antimony	0.13	0.17	27	
Arsenic	5.3	5.6	6	
Barium	122	113	8	
Beryllium	0.65	0.65	0	
Boron	5.0	4.1	20	
Cadmium	0.27	0.22	20	
Calcium	2620	2560	2	
Chromium	21.4	25.3	17	
Cobalt	6.7	7.0	4	
Copper	10.4	11.0	6	
Iron	18600	19200	3	
Lead	18.4	16.5	11	
Lithium	22.7	22.6	0	
Magnesium	4410	4420	0	
Manganese	287	287	0	
Mercury	0.029	0.031	7	
Molybdenum	0.75	0.82	9	
Nickel	16.3	17.6	8	

LDC#: 25550E4

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: CC
2nd Reviewer: A

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

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) 1	Concentration (mg/kg) 3	(≤50) RPD	Qualifications (Parent Only)
Phosphorus	462	451	2	
Potassium	3130	3360	7	
Selenium	0.18	0.20	11	
Silver	0.073	0.049	39	
Sodium	75.0	75.7	1	
Strontium	16.2	15.8	2	
Thallium	0.37	0.36	3	
Tin	2.2	2.3	4	
Titanium	1090	1140	4	
Vanadium	40.6	43.7	7	
Zinc	84.6	82.4	3	
Zirconium	1.2	1.0 U	~~18~~ 200 ✓	

LDC #: 25550E4

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)	Mg	29627.24	30000	98.7	98.7	Y
ICV	ICP/MS (Initial calibration)	V	465.5	500	93.1	93.1	
ICV	CVAA (Initial calibration)	Hg	2.44	2.5	97.6	97.6	
CCV	ICP (Continuing calibration)	Se	483.47	500	96.7	96.7	
CCV	ICP/MS (Continuing calibration)	Cd	24.19	25	96.8	96.8	
CCV	CVAA (Continuing calibration)	Hg	0.97	1.0	97	97	
	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 #: 25550E9

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: CR
2nd Reviewer: [illegible]

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

Percent recoveries (%R) for an ICP interference check sample, a laboratory control sample and a matrix spike sample were recalculated using the following formula:

$\%R = \frac{Found}{True} \times 100$ Where, Found = Concentration of each analyte measured in the analysis of the sample. For the matrix spike calculation, Found = SSR (spiked sample result) - SR (sample result).
True = Concentration of each analyte in the source.

A sample and duplicate relative percent difference (RPD) was recalculated using the following formula:

$RPD = \frac{|S-D|}{(S+D)/2} \times 100$ Where, S = Original sample concentration
D = Duplicate sample concentration

An ICP serial dilution percent difference (%D) was recalculated using the following formula:

$\%D = \frac{|I-SDR|}{I} \times 100$ Where, I = Initial Sample Result (mg/L)
SDR = Serial Dilution Result (mg/L) (Instrument Reading x 5)

Sample ID	Type of Analysis	Element	Found / S / I (units) ~~mg/Kg~~ ug/L	True / D / SDR (units) ~~mg/Kg~~ ug/L	Recalculated %R / RPD / %D	Reported %R / RPD / %D	Acceptable (Y/N)
ICSAB	ICP interference check	Ca	192 ug/L	200 ug/L	96.0	96.0	Y
LCS	Laboratory control sample	Ca	998.9	1000	100	100	
8	Matrix spike	Li	(SSR-SR) 117.3985	121.1857	97	97	
10	Duplicate	Mn	287.1506	283.1987	1	1	
3	ICP serial dilution	Al	126514.81	137492.55	9	9	

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 #: 25550E4

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
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 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 Mg were recalculated and verified using the following equation:

Concentration = $\frac{(RD)(FV)(Dil)}{(In.\ Vol.)}$

Recalculation: $\frac{(100\ mL)(36.83355\ mg/L)}{0.809(1.03\ g)} = 4420\ mg/kg$

RD = Raw data concentration
FV = Final volume (ml)
In. Vol. = Initial volume (ml) or weight (G)
Dil = Dilution factor

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	3	Al	15200	15200	✓
		Sb	0.17	0.17	
		As	5.6	5.6	
		Ba	113	113	
		Be	0.65	0.65	
		B	4.1	4.1	
		Cd	0.22	0.22	
		Ca	2560	2560	
		Cr	25.3	25.3	
		Co	7.0	7.0	
		Cu	11.0	11.0	
		Fe	19200	19200	
		Pb	16.5	16.5	
		Li	22.6	22.6	
		Mg	4420	4420	
		Mn	287	287	
		Hg	0.031	0.031	
		Mo	0.82	0.81	
		Ni	17.6	17.6	
		P	451	451	
		K	3360	3360	
		Se	0.20	0.20	
		Ag	0.049	0.049	
		Na	75.7	75.7	
		Sr	15.8	15.8	
		Tl	0.36	0.36	
		Sn	2.3	2.3	
		Ti	1140	1140	
		V	43.7	43.7	
		Zn	82.4	82.4	
		Zr	1.0	1.0	

Note:

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 20, 2010

LDC Report Date: June 8, 2011

Matrix: Sediment

Parameters: Herbicides

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5MSD

Introduction

This data review covers 9 sediment 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 with the following exceptions:

Date	Standard	Column	Compound	%D	Associated Samples	Flag	A or P
1/6/11	CCV	RTXCLP1	Dalapon 2,4-D Dinoseb	103.9 28.2 21.1	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5MS PBLK19365	J (all detects) UJ (all non-detects)	P
1/6/11	CCV	RTXCLP2	Dalapon 2,4-D	106.5 22.9	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5MS PBLK19365	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.

Sample	Compound	RPD	Flag	A or P
SED-007-SIV-SD-0.0-0.6	2,4-DB	48.63	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE046	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 were identified as field duplicates. No herbicides were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
2,4,5-TP	0.18	0.093U	200 (≤50)	J (all detects) UJ (all non-detects)	A

IV. Blanks

Method blanks were reviewed for each matrix as applicable. No herbicide 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) Duplicate

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
SED-005-SIV-SD-0.0-0.5MS/MSD (SED-005-SIV-SD-0.0-0.5)	Dalapon	90 (12-86)	93 (12-86)	-	J (all detects)	A

VII. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits were within QC limits with the following exceptions:

LCS ID (Associated Samples)	Compound	LCS %R (Limits)	Flag	A or P
LCS (All samples in SDG DE046)	Dalapon	91 (24-89)	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.

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
DUP01-SIV-QC-122010	2,4,5-TP	84.09	J (all detects)	A
SED-003-SIV-SD-0.0-0.5	MCPA	64.61	J (all detects)	A
SED-007-SIV-SD-0.0-0.6	2,4-DB	48.63	J (all detects)	A

All compounds reported below the RL were qualified as follows:

Sample	Finding	Flag	A or P
All samples in SDG DE046	All compounds reported below the RL.	J (all detects)	A

X. System Performance

The system performance was acceptable.

XI. Overall Assessment of Data

Data flags are summarized at the end of this report if data has been qualified.

XII. Field Duplicates

Samples DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 were identified as field duplicates. No herbicides were detected in any of the samples with the following exceptions:

Compound	Concentration (ug/Kg)		RPD (Limits)	Flags	A or P
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
2,4,5-TP	0.18	0.21U	200 (≤50)	J (all detects) UJ (all non-detects)	A

Santa Susana Field Laboratory
Herbicides - Data Qualification Summary - SDG DE046

SDG	Sample	Compound	Flag	A or P	Reason (Code)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5	Dalapon 2,4-D Dinoseb	J (all detects) UJ (all non-detects)	P	Continuing calibration (%D) (C)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5	Dalapon 2,4-D	J (all detects) UJ (all non-detects)	A	Continuing calibration (%D) (C)
DE046	SED-005-SIV-SD-0.0-0.5	Dalapon	J (all detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Dalapon	J (all detects)	P	Laboratory control samples (%R)(L)
DE046	DUP01-SIV-QC-122010	2,4,5-TP	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE046	SED-003-SIV-SD-0.0-0.5	MCPA	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE046	SED-007-SIV-SD-0.0-0.6	2,4-DB	J (all detects)	A	Compound quantitation and CRQLs (RPD) (*IX)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	All compounds reported below the RL.	J (all detects)	A	Compound quantitation and CRQLs (Z)
DE046	DUP01-SIV-QC-122010 SED-005-SIV-SD-0.0-0.5	2,4,5-TP	J (all detects) UJ (all non-detects)	A	Field duplicates (RPD) (FD)

Santa Susana Field Laboratory
Herbicides - Laboratory Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Herbicides - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E5 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/3/11
SDG #: DE046 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: PR
2nd Reviewer: A

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: 12/20/10
II	Initial calibration	A	%RSD ≤ 20, r^2
III.	Calibration verification/ICV	SW	ICV/CCV ≤ 20
IV.	Blanks	A	
V	Surrogate recovery	A	
VI.	Matrix spike/Matrix spike duplicates SIV	SW	
VII.	Laboratory control samples	SW	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	SW	D = 1,3
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:
Sediment

1	DUP01-SIV-QC-122010	11	PBLK19365	21		31	
2	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5	13		23		33	
4	SED-007-SIV-SD-0.0-0.6	14		24		34	
5	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5MSD	19		29		39	
10		20		30		40	

Notes:

LDC #: 25505
SDG #: all cover

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: [illegible]
2nd Reviewer: A

Method: ✓ GC _____ HPLC

Validation Area	Yes	No	NA	Findings/Comments
I. Technical holding times				
All technical holding times were met.	✓			
Cooler temperature criteria was met.	✓			
II. Initial calibration				
Did the laboratory perform a 5 point calibration prior to sample analysis?	✓			
Were all percent relative standard deviations (%RSD) ≤ 20%?	✓			
Was a curve fit used for evaluation?	✓			
Did the initial calibration meet the curve fit acceptance criteria of ≥ 0.990?	✓			
Were the RT windows properly established?	✓			
IV. Continuing calibration				
Was a continuing calibration analyzed daily?	✓			
Were all percent differences (%D) ≤ 20%.0 or percent recoveries 80-120%?	✓			
Were all the retention times within the acceptance windows?		✓		
V. Blanks				
Was a method blank associated with every sample in this SDG?	✓			
Was a method blank analyzed for each matrix and concentration?	✓			
Was there contamination in the method blanks? If yes, please see the Blanks validation completeness worksheet.		✓		
VI. Surrogate spikes				
Were all surrogate %R within the QC limits?	✓			
If the percent recovery (%R) for one or more surrogates was out of QC limits, was a reanalysis performed to confirm samples with %R outside of criteria?			✓	
VII. Matrix spike/Matrix spike duplicates				
Were a matrix spike (MS) and matrix spike duplicate (MSD) analyzed for each matrix in this SDG? If no, indicate which matrix does not have an associated MS/MSD. Soil / Water.	✓			
Was a MS/MSD analyzed every 20 samples of each matrix?	✓			
Were the MS/MSD percent recoveries (%R) and the relative percent differences (RPD) within the QC limits?	✓	✓		
VIII. Laboratory control samples				
Was an LCS analyzed for this SDG?	✓			
Was an LCS analyzed per extraction batch?	✓			
Were the LCS percent recoveries (%R) and relative percent difference (RPD) within the QC limits?	✓	✓		
IX. Regional Quality Assurance and Quality Control				
Were performance evaluation (PE) samples performed?			✓	
Were the performance evaluation (PE) samples within the acceptance limits?			✓	

LDC #: 25550E5
SDG #: all cons

VALIDATION FINDINGS CHECKLIST

Reviewer: FJ
2nd Reviewer:

Validation Area	Yes	No	NA	Findings/Comments
X. Target compound identification				
Were the retention times of reported detects within the RT windows?	✓			
XI. Compound quantitation/CRQLs				
Were compound quantitation and CRQLs adjusted to reflect all sample dilutions and dry weight factors applicable to level IV validation?	✓			
XII. System performance				
System performance was found to be acceptable.	✓			
XIII. Overall assessment of data				
Overall assessment of data was found to be acceptable.	✓			
XIV. Field duplicates				
Field duplicate pairs were identified in this SDG.	✓			
Target compounds were detected in the field duplicates.	✓			
XV. Field blanks				
Field blanks were identified in this SDG.		✓		
Target compounds were detected in the field blanks.			✓	

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 #: 25550E5

VALIDATION FINDINGS WORKSHEET

Continuing Calibration

Page: 1 of 1
Reviewer: FT
2nd Reviewer: ✓

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

What type of continuing calibration calculation was performed? ___%D or ___RPD

[✓ Y] N N/A Were continuing calibration standards analyzed at the required frequencies?

Y [✓ N] N/A Did the continuing calibration standards meet the %D / RPD validation criteria of ≤15.0%?

Level IV Only

[✓ Y] N N/A Were the retention times for all calibrated compounds within their respective acceptance windows?

#	Date	Standard ID	Detector/ Column	Compound	%D / RPD (Limit ≤ ~~15.0~~ 20)	RT (limit)	Associated Samples	Qualifications
	1/6/11	CCV	RTXCLP1	H	103.9	( )	PBLK19365, 1→3, 8	J/UJ/P
	18:40			A	28.2	( )		
				E	21.1	( )		
			RTXCLP2	H	106.5	( )		J/UJ/A
				A	22.9	( )		
						( )		
						( )		
						( )		
						( )		
						( )		
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						( )		

LDC #: 25550E5
SDG #: -

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates

Page: 1 of 1
Reviewer:
2nd Reviewer:

METHOD: GC Herbicides (EPA SW 846 Method 8151)

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 Were the MS/MSD percent recoveries (%R) and relative percent differences (RPD) within the QC limits?

Level IV/D Only

[✓ Y] N N/A Were a MS/MSD analyzed every 20 samples for each matrix and whenever a sample extraction was performed?

#	Date	MS/MSD ID	Compound	MS %R (Limits)	MSD %R (Limits)	RPD (Limits)	Associated Samples	Qualifications
		8/9	H	90 (12-86)	93 (12-86)	( )	3	J det / A
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25550E5

SDG #: -

VALIDATION FINDINGS WORKSHEET

Laboratory Control Samples

Page: 1 of 1

Reviewer: A

2nd Reviewer: [illegible]

METHOD: GC Herbicides (EPA SW 846 Method 8151)

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 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 difference (RPD) within the QC limits?

Level IV/D Only

[✓ Y] N N/A Was a LCS analyzed every 20 samples for each matrix or whenever a sample extraction was performed?

#	Date	LCS/LCSD ID	Compound	LCS %R (Limits)	~~LCSD %R (Limits)~~	~~RPD (Limits)~~	Associated Samples	Qualifications
		LCS	H	91 (24-89)	~~(~~)	~~(~~)	All	J det / P
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		
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				( )	( )	( )		
				( )	( )	( )		
				( )	( )	( )		

LDC #: 25550ET

VALIDATION FINDINGS WORKSHEET
Compound Quantitation and Reported CRQLs

Reviewer: FT
2nd Reviewer: A

METHOD: ✓ GC __ HPLC

Please see qualifications below for all questions answered "N". Not applicable questions are identified as "N/A".

Level IV/D Only

Y N N/A Were CRQLs adjusted for sample dilutions, dry weight factors, etc.?

Y N N/A Did the reported results for detected target compounds agree within 10.0% of the recalculated results?

#	Compound Name	Finding (0/0 RPD Bet 2 column ≤40)	Associated Samples	Qualifications
	D	84.09	1	J/A det
	J	64.61	2	↓
	B	48.63	4	↓

Comments: See sample calculation verification worksheet for recalculations

LDC #: 25505F

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: FT
2nd reviewer:

METHOD: ✓ GC __ HPLC

Y N N/A Were field duplicate pairs identified in this SDG?
Y N N/A Were target compounds detected in the field duplicate pairs?

Compound	Concentration (ug/kg)		%RPD Limit ≤ 50	Qualification Parent only / All Samples
	1	3		
D	0.18	0.21 ~~0.0930~~	200	J/UJ/A

Compound	Concentration ( )		%RPD Limit _____	Qualification Parent only / All Samples

LDC #: 25SDE5
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: FJ
2nd Reviewer: [illegible]

METHOD: GC ✓ HPLC ____

The calibration Factor (CF), average CF, and percent relative standard deviation (%RSD) were recalculated for the compounds identified below using the following calculations:

CF = A/C
average CF = sum of the CF/number of standards
%RSD = 100 * (S/X)

A = Area of compound,
C = Concentration of compound,
S = Standard deviation of the CF
X = Mean of the CFs

3

#	Standard ID	Calibration Date	Compound	Reported CF (20.020 ppb std)	Recalculated CF (20.020 ppb std)	Reported Average CF (Initial)	Recalculated Average CF (Initial)	Reported %RSD	Recalculated %RSD
1	ICAL	1/6/11	Dicamba RTX CLP1	4.93×10^{-1}	4.93×10^{-1}	4.88×10^{-1}	4.88×10^{-1}	6.1	6.1
			2,4-DB	9.10×10^{-2}	9.10×10^{-2}	8.28×10^{-2}	8.28×10^{-2}	10.3	10.3
			RTX CLP2	5.25×10^{-1}	5.25×10^{-1}	5.20×10^{-1}	5.20×10^{-1}	7.2	7.2
2			↓	8.32×10^{-2}	8.32×10^{-2}	7.46×10^{-2}	7.80×10^{-2}	10.9	10.9
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 #: 25502ET
SDG #: pw cover

VALIDATION FINDINGS WORKSHEET
Continuing Calibration Results Verification

Reviewer: EJ
2nd Reviewer:

METHOD: GC ✓ HPLC ____

The percent difference (%D) of the initial calibration average Calibration Factors (CF) and the continuing calibration CF were recalculated for the compounds identified below using the following calculation:

% Difference = 100 * (ave. CF - CF)/ave. CF
CF = A/C

Where: ave. CF = Initial calibration average CF
CF = continuing calibration CF
A = Area of compound
C = Concentration of compound

#	Standard ID	Calibration Date	Compound	Average CF(ical)/ CCV Conc.	Reported CF/Conc. CCV	Recalculated CF/Conc. CCV	Reported %D	Recalculated %D
1	ccv 18:40	1/6/11	Dicamba RTXcvp1	100	88.14	88.14	11.9	11.9
			2,4-DB	500	518.47	518.47	3.7	3.7
			RTXcvP2	100	95.06	95.06	4.9	4.9
2			↓	500	521.63	521.63	4.3	4.3
3	ccv 23:46	1/6/11	RTXcvp1	40.04	39.79	39.79	0.6	0.6
			↓	401.20	375.89	375.89	6.3	6.3
			RTXcvp2	40.04	38.24	38.24	4.5	4.5
4			↓	401.20	355.45	355.45	11.4	11.4

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 #: 25550E3
SDG #: see cover

METHOD: ✓ GC ___ HPLC

VALIDATION FINDINGS WORKSHEET
Surrogate Results Verification

Reviewer: FT
2nd reviewer: A

The percent recoveries (%R) of surrogates were recalculated for the compounds identified below using the following calculation:

% Recovery: SF/SS * 100

Where: SF = Surrogate Found
SS = Surrogate Spiked

Sample ID: #1

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	
2,4-DCPAA	RTX CLP1	6.7	5.495797	~~35~~ 82	82	0

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

Sample ID: _____

Surrogate	Column/Detector	Surrogate Spiked	Surrogate Found	Percent Recovery	Percent Recovery	Percent Difference
				Reported	Recalculated	

LDC #: [illegible]
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Matrix Spike/Matrix Spike Duplicates Results Verification

Page: 1 of 1
Reviewer: EZ
2nd Reviewer: [illegible]

METHOD: ✓ GC __HPLC

The percent recoveries (%R) and relative percent differences (RPD) of the matrix spike and matrix spike duplicate were recalculated for the compounds identified below using the following calculation:

%Recovery = 100 * (SSC - SC)/SA Where SSC = Spiked sample concentration 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.
Gasoline (8015)											
Diesel (8015)											
Benzene (8021B)											
Methane (RSK-175)											
2,4-D (8151)	8.33	8.33	ND	9.29	9.79	112	112	118	118	5	5
Dinoseb (8151)	14.2	14.2	ND	1.70	2.27	12	12	16	16	29	29
Naphthalene (8310)											
Anthracene (8310)											
HMX (8330)											
2,4,6-Trinitrotoluene (8330)											

Comments: Refer to Matrix Spike/Matrix Spike Duplicates findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.

LDC #: 25552ET
SDG #: all cores

VALIDATION FINDINGS WORKSHEET
Laboratory Control Sample/Laboratory Control Sample Duplicate Results Verification

Reviewer: RJ
2nd Reviewer: A

METHOD: ___ GC __HPLC

The percent recoveries (%R) and Relative Percent difference (RPD) of the laboratory control sample and laboratory control sample duplicate were recalculated for the compounds identified below using the following calculation:

% Recovery = 100* (SSC-SC)/SA
RPD = | LCS - LCSD | * 2/(LCS + LCSD)

Where: SSC = Spiked sample concentration
SA = Spike added
LCS = Laboratory control sample percent recovery
SC = Concentration
LCSD = Laboratory control sample duplicate percent recovery

LCS/LCSD samples: LCS

Compound	Spike Added (ug/kg)		Spiked Sample Concentration (ug/kg)		LCS Percent Recovery		LCSD Percent Recovery		LCS/LCSD RPD	
	LCS	LCSD	LCS	LCSD	Reported	Recalc.	Reported	Recalc.	Reported	Recalc.
Gasoline (8015)										
Diesel (8015)										
Benzene (8021B)										
Methane (RSK-175)										
2,4-D (8151)	8.33	NA	8.78	NA	105	105				
Dinoseb (8151)	14.2	↓	1.73	↓	12	12	NA			
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 #: 25550ES
SDG #: [illegible]

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: [illegible]
2nd Reviewer: [illegible]

METHOD: ✓ GC __ HPLC

Y N N/A Were all reported results recalculated and verified for all level IV samples?
Y N N/A Were all recalculated results for detected target compounds within 10% of the reported results?

Concentration= $\frac{(A)(Fv)(Df)}{(RF)(Vs \text{ or } Ws)(\%S/100)}$

A= Area or height of the compound to be measured
Fv= Final Volume of extract
Df= Dilution Factor
RF= Average response factor of the compound in the initial calibration
Vs= Initial volume of the sample
Ws= Initial weight of the sample
%S= Percent Solid

Example:

Sample ID. #1 Compound Name 2,4,5-TP

$$\text{Concentration} = \frac{4496 \quad (2000) \quad (\frac{100}{\cancel{1667}})}{7.14 \times 10^{-1} \quad (60) \quad (0.792)(150295)(1000)}$$

$$= 0.176 \text{ ug/kg}$$

#	Sample ID	Compound	Reported Concentrations ( )	Recalculated Results Concentrations ( )	Qualifications

Comments: _____

SAMPCALew.wpd

Laboratory Data Consultants, Inc.
Data Validation Report

Project/Site Name: Santa Susana Field Laboratory

Collection Date: December 20, 2010

LDC Report Date: June 3, 2011

Matrix: Sediment

Parameters: Wet Chemistry

Validation Level: Level IV

Laboratory: Lancaster Laboratories

Sample Delivery Group (SDG): DE046

Sample Identification

DUP01-SIV-QC-122010
SED-003-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5
SED-007-SIV-SD-0.0-0.6
SED-008-SIV-SD-0.0-0.5
SED-034-SIV-SD-0.0-0.5
SED-037-SIV-SD-0.0-0.5
SED-005-SIV-SD-0.0-0.5MS
SED-005-SIV-SD-0.0-0.5DUP

Introduction

This data review covers 9 sediment samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA Method 300.0 for Fluoride, EPA SW 846 Method 7199 for Hexavalent Chromium, EPA Method 314.0 for Perchlorate, and EPA SW 846 Method 9045C for pH.

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. 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
SED-005-SIV-SD-0.0-0.5MS (All samples in SDG DE046)	Fluoride	62 (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) 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 DE046	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 DUP01-SIV-QC-122010 and SED-005-SIV-SD-0.0-0.5 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
	DUP01-SIV-QC-122010	SED-005-SIV-SD-0.0-0.5			
Fluoride	2.3 mg/Kg	2.6 mg/Kg	12 (≤50)	-	-
Hexavalent chromium	0.37 mg/Kg	0.60 mg/Kg	47 (≤50)	-	-
pH	5.94 units	6.64 units	11 (≤50)	-	-

Santa Susana Field Laboratory
Wet Chemistry - Data Qualification Summary - SDG DE046

SDG	Sample	Analyte	Flag	A or P	Reason (Code)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	Fluoride	J (all detects) UJ (all non-detects)	A	Matrix spike/Matrix spike duplicate (%R) (Q)
DE046	DUP01-SIV-QC-122010 SED-003-SIV-SD-0.0-0.5 SED-005-SIV-SD-0.0-0.5 SED-007-SIV-SD-0.0-0.6 SED-008-SIV-SD-0.0-0.5 SED-034-SIV-SD-0.0-0.5 SED-037-SIV-SD-0.0-0.5	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 DE046

No Sample Data Qualified in this SDG

Santa Susana Field Laboratory
Wet Chemistry - Field Blank Data Qualification Summary - SDG DE046

No Sample Data Qualified in this SDG

LDC #: 25550E6 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/3/11
SDG #: DE046 Level IV Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: CS
2nd Reviewer: W

METHOD: (Analyte) ~~Nitrate-N;~~ Fluoride (EPA Method 300.0), Hexavalent Chromium (EPA SW846 Method 7199), Perchlorate (EPA Method 314.0), ~~Oxidation Reduction Potential (ASTM D1498)~~, pH (EPA SW846 Method 9045C)

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: 12/20/10
II	Initial calibration	A	
III.	Calibration verification	A	
IV	Blanks	A	
V	Matrix Spike/Matrix Spike Duplicates	SW	MS/D
VI.	Duplicates	A	Dup
VII.	Laboratory control samples	A	LCS
VIII.	Sample result verification	A	
IX.	Overall assessment of data	A	
X.	Field duplicates	SW	(1,3)
XI	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: sediment

1	DUP01-SIV-QC-122010	11		21		31	
2	SED-003-SIV-SD-0.0-0.5	12		22		32	
3	SED-005-SIV-SD-0.0-0.5	13		23		33	
4	SED-007-SIV-SD-0.0-0.6	14		24		34	
5	SED-008-SIV-SD-0.0-0.5	15		25		35	
6	SED-034-SIV-SD-0.0-0.5	16		26		36	
7	SED-037-SIV-SD-0.0-0.5	17		27		37	
8	SED-005-SIV-SD-0.0-0.5MS	18		28		38	
9	SED-005-SIV-SD-0.0-0.5DUP	19		29		39	
10		20		30		40	

Notes:

LDC #: 25550E6

VALIDATION FINDINGS CHECKLIST

Page: 1 of 2
Reviewer: CR
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 #: 25550E6

VALIDATION FINDINGS WORKSHEET

Sample Specific Analysis Reference

Page: 1 of 1
Reviewer:
2nd reviewer:

All circled methods are applicable to each sample.

Sample ID	Matrix	Parameter
1-7		[✓ pH] TDS Cl [✓ F] NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4]
		pH TDS Cl F NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC CR^{6+} ClO_4
QC: 8		pH TDS Cl [✓ F] NO_3 NO_2 SO_4 PO_4 ALK CN^- NH_3 TKN TOC [✓ CR^{6+}] [✓ ClO_4]
↓ 9		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 #: 25550E6

VALIDATION FINDINGS WORKSHEET
Matrix Spike Analysis

Reviewer: CR
2nd Reviewer: LW

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	Matrix	Analyte	%R	Associated Samples	Qualifications
		8	S	F	62 (80-120)	All	J (all detects) A (Q)

Comments:

LDC#_25550E6_

VALIDATION FINDINGS WORKSHEET
Field Duplicates

Reviewer: JR
2nd Reviewer: A

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/Kg)		RPD (≤50)	
	1	3		
Fluoride	2.3	2.6	12	
Hexavalent Chromium	0.37	0.60	47	
pH (no units)	5.94	6.64	11	

LDC #: 25550E6

Validation Findings Worksheet
Initial and Continuing Calibration Calculation Verification

Page: 1 of 1
Reviewer: QR
2nd Reviewer:

Method: Inorganics, Method See Cover

The correlation coefficient (r) for the calibration of Cl04 was recalculated. Calibration date: 12/6/10

An initial or continuing calibration verification percent recovery (%R) was recalculated for each type of analysis using the following formula:

$$\%R = \frac{\text{Found} \times 100}{\text{True}}$$

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	Cl04	s1	2	0.003	*1.000*	0.999	Y
		s2	4.00	0.01			
		s3	10.00	0.024			
		s4	25.00	0.063			
		s5	100.00	0.263			
Calibration verification	F	CCV	1.5	1.5133	101	101	
Calibration verification	Cr6+	CCV	200	203.1540	102	102	
Calibration verification	Cl04	CCV	100	100.7629	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 #: 25550E6

VALIDATION FINDINGS WORKSHEET
Level IV Recalculation Worksheet

Reviewer: QR
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) mg/kg	True / D (units) mg/kg	Recalculated %R / RPD	Reported %R / RPD	Acceptable (Y/N)
LCS	Laboratory control sample	F	9.6	10	96	-	Y
8	Matrix spike sample	Cla	(SSR-SR) 503 ug/kg	499 ug/kg	101	101	
9	Duplicate sample	Cl	0.49	0.61	22	22	✓

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 #: 25550B6

VALIDATION FINDINGS WORKSHEET
Sample Calculation Verification

Page: 1 of 1
Reviewer: CR
2nd reviewer: [illegible]

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:

$$\frac{\left(\frac{0.045 + 0.0204}{0.3609}\right)(50\,mL)}{(0.792)(5.025)} = 2.3\ mg/kg$$

#	Sample ID	Analyte	Reported Concentration (mg/kg)	Calculated Concentration (mg/kg)	Acceptable (Y/N)
	1	F	2.3	2.3	Y
		Cl	0.37	0.37	↓
		pH	5.94	5.94	↓

Note:

SAMPLE DELIVERY GROUP

DE050

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-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3050B	6010B	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3050B	6020	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3060A	7199	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3550B	8081A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3550B	8082	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3550B	8151A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3550B	8270C	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	3550B	8270C SIM	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	Gen Prep	9045M	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	METHOD	300.0	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	METHOD	314.0	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5	6172316	N	METHOD	7471A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3050B	6010B	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3050B	6020	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3060A	7199	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3550B	8081A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3550B	8082	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3550B	8151A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3550B	8270C	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	3550B	8270C SIM	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	METHOD	300.0	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	METHOD	314.0	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MS	6172317	MS	METHOD	7471A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	3050B	6010B	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	3050B	6020	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	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
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	3550B	8082	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	3550B	8151A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	3550B	8270C	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	3550B	8270C SIM	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5MSD	6172318	MSD	METHOD	7471A	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	3050B	6010B	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	3050B	6020	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	3060A	7199	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	Gen Prep	9045M	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	METHOD	300.0	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	METHOD	314.0	III
21-Dec-2010	SED-002-SIV-SD-0.0-0.5DUP	6172319	DUP	METHOD	7471A	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3050B	6010B	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3050B	6020	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3060A	7199	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3550B	8081A	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3550B	8082	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3550B	8151A	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3550B	8270C	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	3550B	8270C SIM	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	Gen Prep	9045M	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	METHOD	300.0	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	METHOD	314.0	III
21-Dec-2010	DUP02-SIV-QC-122110	6172315	FD	METHOD	7471A	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3050B	6010B	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	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
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3060A	7199	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3550B	8081A	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3550B	8082	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3550B	8151A	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3550B	8270C	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	3550B	8270C SIM	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	Gen Prep	9045M	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	METHOD	300.0	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	METHOD	314.0	III
21-Dec-2010	SED-039-SIV-SD-0.0-0.5	6172323	N	METHOD	7471A	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3050B	6010B	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3050B	6020	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3060A	7199	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3550B	8081A	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3550B	8082	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3550B	8151A	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3550B	8270C	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	3550B	8270C SIM	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	Gen Prep	9045M	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	METHOD	300.0	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	METHOD	314.0	III
21-Dec-2010	SED-036-SIV-SD-0.0-0.5	6172321	N	METHOD	7471A	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3050B	6010B	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3050B	6020	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3060A	7199	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	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
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3550B	8082	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3550B	8151A	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3550B	8270C	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	3550B	8270C SIM	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	Gen Prep	9045M	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	METHOD	300.0	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	METHOD	314.0	III
21-Dec-2010	SED-015-SIV-SD-0.0-0.5	6172320	N	METHOD	7471A	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3050B	6010B	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3050B	6020	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3060A	7199	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3550B	8081A	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3550B	8082	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3550B	8151A	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3550B	8270C	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	3550B	8270C SIM	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	Gen Prep	9045M	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	METHOD	300.0	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	N	METHOD	314.0	III
21-Dec-2010	SED-038-SIV-SD-0.0-0.5	6172322	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *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	U	0.95	MDL	1.2	PQL	mg/Kg	UJ	FD

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
FLUORIDE	1.1	J	0.96	MDL	1.2	PQL	mg/Kg	J	Z, FD

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
FLUORIDE	1.2	J	1.0	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.68	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
SODIUM	70.3	J	42.2	MDL	113	PQL	mg/Kg	J	Z
TIN	2.02	J	1.13	MDL	11.3	PQL	mg/Kg	U	B
Zirconium	3.82	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
BORON	4.65	J	1.01	MDL	5.70	PQL	mg/Kg	J	Z
SODIUM	74.9	J	42.5	MDL	114	PQL	mg/Kg	J	Z
TIN	2.11	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	4.42	J	0.957	MDL	5.70	PQL	mg/Kg	J	Z

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
BORON	5.34	J	1.14	MDL	6.38	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
SODIUM	72.3	J	47.6	MDL	128	PQL	mg/Kg	J	Z
TIN	2.15	J	1.28	MDL	12.8	PQL	mg/Kg	U	B
Zirconium	2.32	J	1.07	MDL	6.38	PQL	mg/Kg	J	Z

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
SODIUM	93.5	J	47.2	MDL	126	PQL	mg/Kg	J	Z
TIN	3.30	J	1.26	MDL	12.6	PQL	mg/Kg	U	B
Zirconium	5.96	J	1.06	MDL	6.32	PQL	mg/Kg	J	Z

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
BORON	4.94	J	1.02	MDL	5.72	PQL	mg/Kg	J	Z
SODIUM	61.9	J	42.7	MDL	114	PQL	mg/Kg	J	Z
TIN	2.03	J	1.14	MDL	11.4	PQL	mg/Kg	U	B
Zirconium	2.81	J	0.961	MDL	5.72	PQL	mg/Kg	J	Z

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
BORON	3.97	J	1.16	MDL	6.50	PQL	mg/Kg	J	Z
SODIUM	59.6	J	48.5	MDL	130	PQL	mg/Kg	J	Z
TIN	2.30	J	1.30	MDL	13.0	PQL	mg/Kg	U	B
Zirconium	2.19	J	1.09	MDL	6.50	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.131	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: DE050 **Laboratory:** LL

EDD Filename: PrepDE050_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *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		0.0572	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0806	J	0.0686	MDL	0.229	PQL	mg/Kg	J	Z, Q
ARSENIC	6.94		0.0686	MDL	0.457	PQL	mg/Kg	J	Q
CADMIUM	0.239		0.0412	MDL	0.114	PQL	mg/Kg	J	Q
CHROMIUM	22.0		0.137	MDL	0.457	PQL	mg/Kg	J	Q
COBALT	6.50		0.0229	MDL	0.114	PQL	mg/Kg	J	A
COPPER	9.16		0.0755	MDL	0.457	PQL	mg/Kg	J	Q
LEAD	10.3		0.0119	MDL	0.229	PQL	mg/Kg	J	Q
NICKEL	13.1		0.114	MDL	0.457	PQL	mg/Kg	J	Q, A
SILVER	0.0362	J	0.0137	MDL	0.114	PQL	mg/Kg	J	Z
VANADIUM	45.8		0.0252	MDL	0.114	PQL	mg/Kg	J	Q

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 9:50:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.153	J	0.0469	MDL	0.469	PQL	mg/Kg	J	Z

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 9:50:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.457		0.0586	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.111	J	0.0704	MDL	0.235	PQL	mg/Kg	J	Z, Q
ARSENIC	6.18		0.0704	MDL	0.469	PQL	mg/Kg	J	Q
CADMIUM	0.233		0.0422	MDL	0.117	PQL	mg/Kg	J	Q
CHROMIUM	20.4		0.141	MDL	0.469	PQL	mg/Kg	J	Q
COBALT	5.89		0.0235	MDL	0.117	PQL	mg/Kg	J	A
COPPER	8.69		0.0774	MDL	0.469	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
LEAD	10.0		0.0122	MDL	0.235	PQL	mg/Kg	J	Q
NICKEL	12.1		0.117	MDL	0.469	PQL	mg/Kg	J	Q, A
SILVER	0.0286	J	0.0141	MDL	0.117	PQL	mg/Kg	J	Z
VANADIUM	42.4		0.0258	MDL	0.117	PQL	mg/Kg	J	Q

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
CADMIUM	0.191		0.0464	MDL	0.129	PQL	mg/Kg	J	Q

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 1:05:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.188	J	0.0516	MDL	0.516	PQL	mg/Kg	J	Z

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 1:05:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.513		0.0645	MDL	0.129	PQL	mg/Kg	J	Q

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.0859	J	0.0774	MDL	0.258	PQL	mg/Kg	J	Z, Q
ARSENIC	11.6		0.0774	MDL	0.516	PQL	mg/Kg	J	Q
CHROMIUM	18.7		0.155	MDL	0.516	PQL	mg/Kg	J	Q
COBALT	5.55		0.0258	MDL	0.129	PQL	mg/Kg	J	A
COPPER	9.12		0.0851	MDL	0.516	PQL	mg/Kg	J	Q
LEAD	13.2		0.0134	MDL	0.258	PQL	mg/Kg	J	Q
NICKEL	12.7		0.129	MDL	0.516	PQL	mg/Kg	J	Q, A
SILVER	0.0473	J	0.0155	MDL	0.129	PQL	mg/Kg	J	Z
VANADIUM	36.1		0.0284	MDL	0.129	PQL	mg/Kg	J	Q

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6020 **Matrix: SO**

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.490	J	0.0496	MDL	0.496	PQL	mg/Kg	J	Z

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 11:45:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.783		0.0620	MDL	0.124	PQL	mg/Kg	J	Q

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.203	J	0.0744	MDL	0.248	PQL	mg/Kg	J	Z, Q
ARSENIC	15.7		0.0744	MDL	0.496	PQL	mg/Kg	J	Q
CADMIUM	0.285		0.0446	MDL	0.124	PQL	mg/Kg	J	Q
CHROMIUM	41.7		0.149	MDL	0.496	PQL	mg/Kg	J	Q
COBALT	13.1		0.0248	MDL	0.124	PQL	mg/Kg	J	A
COPPER	22.4		0.0818	MDL	0.496	PQL	mg/Kg	J	Q
LEAD	18.6		0.0129	MDL	0.248	PQL	mg/Kg	J	Q
NICKEL	28.0		0.124	MDL	0.496	PQL	mg/Kg	J	Q, A
VANADIUM	79.5		0.0273	MDL	0.124	PQL	mg/Kg	J	Q

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 3:15:00 *Analysis Type:* REA2 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.161	J	0.0449	MDL	0.449	PQL	mg/Kg	J	Z

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 3:15:00 *Analysis Type:* REA3 *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.560		0.0561	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 3:15:00 *Analysis Type:* RES *Dilution:* 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ANTIMONY	0.0951	J	0.0673	MDL	0.224	PQL	mg/Kg	J	Z, Q
ARSENIC	5.11		0.0673	MDL	0.449	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: DE050 **Laboratory:** LL

EDD Filename: PrepDE050_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6020 **Matrix:** SO

Sample ID: SED-038-SIV-SD-0.0-0.5 **Collected:** 12/21/2010 3:15:00 **Analysis Type:** RES **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CADMIUM	0.248		0.0404	MDL	0.112	PQL	mg/Kg	J	Q
CHROMIUM	24.0		0.135	MDL	0.449	PQL	mg/Kg	J	Q
COBALT	6.49		0.0224	MDL	0.112	PQL	mg/Kg	J	A
COPPER	9.33		0.0740	MDL	0.449	PQL	mg/Kg	J	Q
LEAD	12.0		0.0117	MDL	0.224	PQL	mg/Kg	J	Q
NICKEL	13.7		0.112	MDL	0.449	PQL	mg/Kg	J	Q, A
SILVER	0.0475	J	0.0135	MDL	0.112	PQL	mg/Kg	J	Z
VANADIUM	44.4		0.0247	MDL	0.112	PQL	mg/Kg	J	Q

Sample ID: SED-039-SIV-SD-0.0-0.5 **Collected:** 12/21/2010 10:55:00 **Analysis Type:** REA2 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
SELENIUM	0.136	J	0.0515	MDL	0.515	PQL	mg/Kg	J	Z

Sample ID: SED-039-SIV-SD-0.0-0.5 **Collected:** 12/21/2010 10:55:00 **Analysis Type:** REA3 **Dilution:** 2

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
MOLYBDENUM	0.364		0.0644	MDL	0.129	PQL	mg/Kg	J	Q

Sample ID: SED-039-SIV-SD-0.0-0.5 **Collected:** 12/21/2010 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	0.0773	U	0.0773	MDL	0.258	PQL	mg/Kg	UJ	Q
ARSENIC	6.51		0.0773	MDL	0.515	PQL	mg/Kg	J	Q
CADMIUM	0.125	J	0.0464	MDL	0.129	PQL	mg/Kg	J	Z, Q
CHROMIUM	18.3		0.155	MDL	0.515	PQL	mg/Kg	J	Q
COBALT	6.80		0.0258	MDL	0.129	PQL	mg/Kg	J	A
COPPER	7.54		0.0850	MDL	0.515	PQL	mg/Kg	J	Q
LEAD	10.3		0.0134	MDL	0.258	PQL	mg/Kg	J	Q
NICKEL	11.6		0.129	MDL	0.515	PQL	mg/Kg	J	Q, A
SILVER	0.0238	J	0.0155	MDL	0.129	PQL	mg/Kg	J	Z
VANADIUM	37.0		0.0283	MDL	0.129	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 7199 **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *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	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
HEXAVALENT CHROMIUM	0.25	J	0.24	MDL	1.2	PQL	mg/Kg	J	Z

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.43	J	0.25	MDL	1.3	PQL	mg/Kg	J	Z

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
HEXAVALENT CHROMIUM	0.29	J	0.27	MDL	1.3	PQL	mg/Kg	J	Z

Method Category: METALS

Method: 7471A **Matrix: SO**

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
MERCURY	0.0053	J	0.0036	MDL	0.127	PQL	mg/Kg	J	Z

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.0109	J	0.0034	MDL	0.118	PQL	mg/Kg	J	Z

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
MERCURY	0.0059	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
4,4'-DDD	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
4,4'-DDE	0.27	U	0.27	MDL	0.40	PQL	ug/Kg	UJ	S
4,4'-DDT	0.49	U	0.49	MDL	0.49	PQL	ug/Kg	UJ	S
ALDRIN	0.078	U	0.078	MDL	0.20	PQL	ug/Kg	UJ	S
ALPHA-BHC	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	L, S
BETA-BHC	0.071	U	0.071	MDL	0.20	PQL	ug/Kg	UJ	S
Chlordane	0.95	U	0.95	MDL	4.0	PQL	ug/Kg	UJ	S
DELTA-BHC	0.043	U	0.043	MDL	0.20	PQL	ug/Kg	UJ	S
DIELDRIN	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN I	0.052	U	0.052	MDL	0.20	PQL	ug/Kg	UJ	S
ENDOSULFAN II	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDOSULFAN SULFATE	0.23	U	0.23	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN ALDEHYDE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
ENDRIN KETONE	0.078	U	0.078	MDL	0.40	PQL	ug/Kg	UJ	S
gamma-BHC (Lindane)	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	L, S
HEPTACHLOR	0.071	U	0.071	MDL	0.20	PQL	ug/Kg	UJ	S
HEPTACHLOR EPOXIDE	0.040	U	0.040	MDL	0.20	PQL	ug/Kg	UJ	S
METHOXYCHLOR	0.40	U	0.40	MDL	2.0	PQL	ug/Kg	UJ	S
MIREX	0.15	U	0.15	MDL	0.40	PQL	ug/Kg	UJ	S
TOXAPHENE	2.6	U	2.6	MDL	7.8	PQL	ug/Kg	UJ	S

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ALPHA-BHC	0.041	U	0.041	MDL	0.20	PQL	ug/Kg	UJ	L
gamma-BHC (Lindane)	0.041	U	0.041	MDL	0.20	PQL	ug/Kg	UJ	L

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ALPHA-BHC	0.044	U	0.044	MDL	0.22	PQL	ug/Kg	UJ	L
DELTA-BHC	0.11	J	0.047	MDL	0.22	PQL	ug/Kg	J	Z
gamma-BHC (Lindane)	0.044	U	0.044	MDL	0.22	PQL	ug/Kg	UJ	L
HEPTACHLOR	0.11	J	0.078	MDL	0.22	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8081A **Matrix: SO**

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ALPHA-BHC	0.043	U	0.043	MDL	0.21	PQL	ug/Kg	UJ	L
DELTA-BHC	0.26		0.046	MDL	0.21	PQL	ug/Kg	J	S
gamma-BHC (Lindane)	0.043	U	0.043	MDL	0.21	PQL	ug/Kg	UJ	L

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ALPHA-BHC	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	L
gamma-BHC (Lindane)	0.039	U	0.039	MDL	0.19	PQL	ug/Kg	UJ	L

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ALDRIN	0.13	J	0.088	MDL	0.22	PQL	ug/Kg	J	Z
ALPHA-BHC	0.045	U	0.045	MDL	0.22	PQL	ug/Kg	UJ	L
gamma-BHC (Lindane)	0.16	J	0.045	MDL	0.22	PQL	ug/Kg	J	Z, L

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *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	0.68	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, L, 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	1.9	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, S, L

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
AROCLOR 1260	0.65	J	0.39	MDL	2.0	PQL	ug/Kg	J	Z, Q, L, 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	1.3	J	1.2	MDL	3.9	PQL	ug/Kg	J	Z, 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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8082 **Matrix: SO**

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	2.4		0.43	MDL	2.2	PQL	ug/Kg	J	S, L
AROCLOR 1260	0.71	J	0.43	MDL	2.2	PQL	ug/Kg	J	Z, L, 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	1.6	J	1.3	MDL	4.3	PQL	ug/Kg	J	Z, S, L

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
AROCLOR 1260	0.77	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z, L, S
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: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
AROCLOR 1260	1.0	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z, L
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	2.8	J	1.1	MDL	3.8	PQL	ug/Kg	J	Z, L

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
AROCLOR 1254	4.2		0.44	MDL	2.3	PQL	ug/Kg	J	S, L
AROCLOR 1260	1.3	J	0.44	MDL	2.3	PQL	ug/Kg	J	Z, L, S
Aroclor 5432	1.3	U	1.3	MDL	4.4	PQL	ug/Kg	UJ	L
Aroclor 5442	1.3	U	1.3	MDL	4.4	PQL	ug/Kg	UJ	L
Aroclor 5460	2.1	J	1.3	MDL	4.4	PQL	ug/Kg	J	Z, S, L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

Method: 8151A **Matrix: SO**

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
2,4,5-TP (Silvex)	0.18	J	0.089	MDL	0.20	PQL	ug/Kg	J	Z, FD
DICAMBA	1.2	J	0.48	MDL	1.4	PQL	ug/Kg	J	Z, FD
DICHLOROPROP	0.96	J	0.95	MDL	2.0	PQL	ug/Kg	J	Z, FD
DINOSEB	0.95	U	0.95	MDL	2.9	PQL	ug/Kg	R	L

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
2,4,5-TP (Silvex)	0.090	U	0.090	MDL	0.20	PQL	ug/Kg	UJ	FD
DICAMBA	0.48	U	0.48	MDL	1.4	PQL	ug/Kg	UJ	FD
DICHLOROPROP	0.96	U	0.96	MDL	2.0	PQL	ug/Kg	UJ	FD
DINOSEB	0.96	U	0.96	MDL	2.9	PQL	ug/Kg	R	L

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
DINOSEB	1.0	U	1.0	MDL	3.1	PQL	ug/Kg	R	L

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
DINOSEB	1.0	U	1.0	MDL	3.0	PQL	ug/Kg	R	L

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
2,4-D	3.0	J	1.4	MDL	4.1	PQL	ug/Kg	J	Z
DINOSEB	0.92	U	0.92	MDL	2.7	PQL	ug/Kg	R	L

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
DINOSEB	1.1	U	1.1	MDL	3.2	PQL	ug/Kg	R	L

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE050 **Laboratory:** LL

EDD Filename: PrepDE050_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: SVOA

Method: 8270C **Matrix:** SO

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *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	87	J	20	MDL	400	PQL	ug/Kg	J	Z, FD

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	1400	U	1400	MDL	4000	PQL	ug/Kg	UJ	Q
BIS(2-ETHYLHEXYL)PHTHALATE	45	J	20	MDL	400	PQL	ug/Kg	J	Z, FD

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	67	J	22	MDL	430	PQL	ug/Kg	J	Z

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	48	J	21	MDL	420	PQL	ug/Kg	J	Z
Butylbenzylphthalate	56	J	21	MDL	210	PQL	ug/Kg	J	Z

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	30	J	19	MDL	380	PQL	ug/Kg	J	Z

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
BIS(2-ETHYLHEXYL)PHTHALATE	33	J	22	MDL	440	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: DUP02-SIV-QC-122110 *Collected:* 12/21/2010 9:52:00 *Analysis Type:* RES-BASE/NEUTRAL *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
ACENAPHTHYLENE	0.47	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z, FD
BENZO(B)FLUORANTHENE	1.5	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
CHRYSENE	1.1	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
FLUORANTHENE	1.6	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PHENANTHRENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.1	J	0.79	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SED-002-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ACENAPHTHYLENE	0.40	U	0.40	MDL	2.0	PQL	ug/Kg	UJ	FD
BENZO(B)FLUORANTHENE	1.3	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
BENZO(G,H,I)PERYLENE	0.80	U	0.80	MDL	2.0	PQL	ug/Kg	UJ	Q
CHRYSENE	0.90	J	0.40	MDL	2.0	PQL	ug/Kg	J	Z
FLUORANTHENE	1.1	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
NAPHTHALENE	2.6		0.80	MDL	2.0	PQL	ug/Kg	J	Q
PHENANTHRENE	0.93	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z
PYRENE	1.3	J	0.80	MDL	2.0	PQL	ug/Kg	J	Z

Sample ID: SED-015-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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-METHYLNAPHTHALENE	1.8	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
ACENAPHTHYLENE	0.47	J	0.43	MDL	2.2	PQL	ug/Kg	J	Z
BENZO(B)FLUORANTHENE	1.8	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	1.1	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
CHRYSENE	1.9	J	0.43	MDL	2.2	PQL	ug/Kg	J	Z
FLUORANTHENE	1.9	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.87	MDL	2.2	PQL	ug/Kg	J	Z

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ACENAPHTHYLENE	0.46	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
BENZO(A)PYRENE	1.1	J	0.84	MDL	2.1	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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: SVOA

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

Sample ID: SED-036-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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(K)FLUORANTHENE	0.96	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
CHRYSENE	1.4	J	0.42	MDL	2.1	PQL	ug/Kg	J	Z
FLUORANTHENE	2.0	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
NAPHTHALENE	1.9	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PHENANTHRENE	1.4	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z
PYRENE	1.5	J	0.84	MDL	2.1	PQL	ug/Kg	J	Z

Sample ID: SED-038-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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
ANTHRACENE	0.39	J	0.38	MDL	1.9	PQL	ug/Kg	J	Z
BENZO(A)ANTHRACENE	1.2	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(K)FLUORANTHENE	1.3	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z
Di-n-butylphthalate	15	J	6.9	MDL	21	PQL	ug/Kg	J	Z
NAPHTHALENE	1.5	J	0.76	MDL	1.9	PQL	ug/Kg	J	Z

Sample ID: SED-039-SIV-SD-0.0-0.5 *Collected:* 12/21/2010 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	0.88	MDL	2.2	PQL	ug/Kg	J	Z
BENZO(K)FLUORANTHENE	0.91	J	0.88	MDL	2.2	PQL	ug/Kg	J	Z
Butylbenzylphthalate	17	J	8.0	MDL	24	PQL	ug/Kg	J	Z
FLUORANTHENE	2.0	J	0.88	MDL	2.2	PQL	ug/Kg	J	Z
FLUORENE	2.0	J	0.88	MDL	2.2	PQL	ug/Kg	J	Z
NAPHTHALENE	1.7	J	0.88	MDL	2.2	PQL	ug/Kg	J	Z
PHENANTHRENE	1.6	J	0.88	MDL	2.2	PQL	ug/Kg	J	Z
PYRENE	1.4	J	0.88	MDL	2.2	PQL	ug/Kg	J	Z

* denotes a non-reportable result

Data Qualifier Summary

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_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: DE050 **Laboratory: LL**

EDD Filename: PrepDE050_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

DE050

Method Blank Outlier Report

Lab Reporting Batch ID: DE050 Laboratory: LL

EDD Filename: DE050_v1 eQAPP Name: CDM_SSFL_110509

Method: 6010B
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35708EB221714	12/30/2010 5:14:00 PM	ALUMINUM	16.5 mg/Kg	DUP02-SIV-QC-122110
		CALCIUM	13.9 mg/Kg	SED-002-SIV-SD-0.0-0.5
		IRON	6.65 mg/Kg	SED-015-SIV-SD-0.0-0.5
		PHOSPHORUS	1.41 mg/Kg	SED-036-SIV-SD-0.0-0.5
		STRONTIUM	0.0782 mg/Kg	SED-038-SIV-SD-0.0-0.5
		TIN	1.13 mg/Kg	SED-039-SIV-SD-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
DUP02-SIV-QC-122110(RES)	TIN	2.02 mg/Kg	2.02U mg/Kg
SED-002-SIV-SD-0.0-0.5(RES)	TIN	2.11 mg/Kg	2.11U mg/Kg
SED-015-SIV-SD-0.0-0.5(RES)	TIN	2.15 mg/Kg	2.15U mg/Kg
SED-036-SIV-SD-0.0-0.5(RES)	TIN	3.30 mg/Kg	3.30U mg/Kg
SED-038-SIV-SD-0.0-0.5(RES)	TIN	2.03 mg/Kg	2.03U mg/Kg
SED-039-SIV-SD-0.0-0.5(RES)	TIN	2.30 mg/Kg	2.30U mg/Kg

Method: 6020
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P35726BB220955A	1/3/2011 9:55:00 AM	COPPER	0.203 mg/Kg	DUP02-SIV-QC-122110
		LEAD	0.0114 mg/Kg	SED-002-SIV-SD-0.0-0.5
		NICKEL	0.121 mg/Kg	SED-015-SIV-SD-0.0-0.5
		ZINC	0.601 mg/Kg	SED-036-SIV-SD-0.0-0.5
				SED-038-SIV-SD-0.0-0.5
				SED-039-SIV-SD-0.0-0.5

Method: 8151A
Matrix: SO

Method Blank Sample ID	Analysis Date	Analyte	Result	Associated Samples
P04043AB241152A	1/7/2011 11:52:00 AM	MCPP	500 ug/Kg	DUP02-SIV-QC-122110
				SED-002-SIV-SD-0.0-0.5
				SED-015-SIV-SD-0.0-0.5
				SED-036-SIV-SD-0.0-0.5
				SED-038-SIV-SD-0.0-0.5
				SED-039-SIV-SD-0.0-0.5

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE050 Laboratory: LL

EDD Filename: DE050_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
SED-002-SIV-SD-0.0-0.5MSD (SED-002-SIV-SD-0.0-0.5)	AROCLOR 1260	-	152	39.00-149.00	-	AROCLOR 1242, 1248, 1254, 1260	J (all detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-002-SIV-SD-0.0-0.5MS	4,4'-DDE	171	202	18.00-161.00	-	4,4'-DDE	J(all detects)
SED-002-SIV-SD-0.0-0.5MSD	4,4'-DDT	-	182	10.00-176.00	-	4,4'-DDT	
(SED-002-SIV-SD-0.0-0.5)							

Method: 8151A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-002-SIV-SD-0.0-0.5MSD (SED-002-SIV-SD-0.0-0.5)	DALAPON	-	103	12.00-86.00	57 (50.00)	DALAPON	J(all detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	MS %R	MSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
SED-002-SIV-SD-0.0-0.5MS	ARSENIC	151	199	75.00-125.00	-	ARSENIC	
SED-002-SIV-SD-0.0-0.5MSD	CADMIUM	142	135	75.00-125.00	-	CADMIUM	
(DUP02-SIV-QC-122110	CHROMIUM	150	166	75.00-125.00	-	CHROMIUM	
SED-002-SIV-SD-0.0-0.5	COPPER	126	132	75.00-125.00	-	COPPER	
SED-015-SIV-SD-0.0-0.5	LEAD	164	179	75.00-125.00	-	LEAD	J(all detects)
SED-036-SIV-SD-0.0-0.5	NICKEL	143	143	75.00-125.00	-	NICKEL	
SED-038-SIV-SD-0.0-0.5	VANADIUM	185	203	75.00-125.00	-	VANADIUM	Zn No Qual, >4x
SED-039-SIV-SD-0.0-0.5)	ZINC	226	210	75.00-125.00	-	ZINC	
SED-002-SIV-SD-0.0-0.5MS	ANTIMONY	37	45	75.00-125.00	-	ANTIMONY	
SED-002-SIV-SD-0.0-0.5MSD							
(DUP02-SIV-QC-122110							
SED-002-SIV-SD-0.0-0.5							J(all detects)
SED-015-SIV-SD-0.0-0.5							UJ(all non-detects)
SED-036-SIV-SD-0.0-0.5							
SED-038-SIV-SD-0.0-0.5							
SED-039-SIV-SD-0.0-0.5)							
SED-002-SIV-SD-0.0-0.5MS	MOLYBDENUM	139	140	75.00-125.00	-	MOLYBDENUM	
SED-002-SIV-SD-0.0-0.5MSD							
(DUP02-SIV-QC-122110							
SED-002-SIV-SD-0.0-0.5							J(all detects)
SED-015-SIV-SD-0.0-0.5							
SED-036-SIV-SD-0.0-0.5							
SED-038-SIV-SD-0.0-0.5							
SED-039-SIV-SD-0.0-0.5)							

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_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
SED-002-SIV-SD-0.0-0.5MS SED-002-SIV-SD-0.0-0.5MSD (DUP02-SIV-QC-122110 SED-002-SIV-SD-0.0-0.5 SED-015-SIV-SD-0.0-0.5 SED-036-SIV-SD-0.0-0.5 SED-038-SIV-SD-0.0-0.5 SED-039-SIV-SD-0.0-0.5)	BARIUM	306	253	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
SED-002-SIV-SD-0.0-0.5MS SED-002-SIV-SD-0.0-0.5MSD (DUP02-SIV-QC-122110 SED-002-SIV-SD-0.0-0.5 SED-015-SIV-SD-0.0-0.5 SED-036-SIV-SD-0.0-0.5 SED-038-SIV-SD-0.0-0.5 SED-039-SIV-SD-0.0-0.5)	ALUMINUM CALCIUM TITANIUM	726 153 186	535 145 192	75.00-125.00 75.00-125.00 75.00-125.00	- - -	ALUMINUM CALCIUM TITANIUM	No Qual, >4x
SED-002-SIV-SD-0.0-0.5MS SED-002-SIV-SD-0.0-0.5MSD (DUP02-SIV-QC-122110 SED-002-SIV-SD-0.0-0.5 SED-015-SIV-SD-0.0-0.5 SED-036-SIV-SD-0.0-0.5 SED-038-SIV-SD-0.0-0.5 SED-039-SIV-SD-0.0-0.5)	IRON MAGNESIUM	-881 -20	-1536 -81	75.00-125.00 75.00-125.00	- -	IRON MAGNESIUM	No Qual, >4x
SED-002-SIV-SD-0.0-0.5MS SED-002-SIV-SD-0.0-0.5MSD (DUP02-SIV-QC-122110 SED-002-SIV-SD-0.0-0.5 SED-015-SIV-SD-0.0-0.5 SED-036-SIV-SD-0.0-0.5 SED-038-SIV-SD-0.0-0.5 SED-039-SIV-SD-0.0-0.5)	MANGANESE	49	40	75.00-125.00	-	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
SED-002-SIV-SD-0.0-0.5MS SED-002-SIV-SD-0.0-0.5MSD (SED-002-SIV-SD-0.0-0.5)	BENZIDINE	25	15	35.00-141.00	53 (30.00)	BENZIDINE	J(all detects) UJ(all non-detects)

Matrix Spike/Matrix Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_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*
SED-002-SIV-SD-0.0-0.5MS SED-002-SIV-SD-0.0-0.5MSD (SED-002-SIV-SD-0.0-0.5)	Butylbenzylphthalate Di-n-octylphthalate NAPHTHALENE	171 246 104	- 242 -	73.00-140.00 40.00-192.00 61.00-102.00	- - -	Butylbenzylphthalate Di-n-octylphthalate NAPHTHALENE	J(all detects)
SED-002-SIV-SD-0.0-0.5MS (SED-002-SIV-SD-0.0-0.5)	BENZO(G,H,I)PERYLENE	30	-	33.00-141.00	-	BENZO(G,H,I)PERYLENE	J(all detects) UJ(all non-detects)

Lab Duplicate Outlier Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-002-SIV-SD-0.0-0.5DUP (DUP02-SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	SILVER	27	20.00	No Qual OK by difference

Method: 7199
Matrix: SO

QC Sample ID (Associated Sample ID)	Analyte	Sample RPD	eQAPP RPD	Flag
SED-002-SIV-SD-0.0-0.5DUP (DUP02-SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	HEXAVALENT CHROMIUM	73	20.00	No Qual OK by difference

Lab Control Spike/Lab Control Spike Duplicate Outlier Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_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
P03648AQ241745A (DUP02 -SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	AROCLOR 1260	167	-	65.00-137.00	-	AROCLOR 1242, 1248, 1254, 1260	J (all detects)
P03648AY241804A (DUP02 -SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	Aroclor 5442	-	68	75.00-125.00	-	Aroclor 5432, 5442, 5460	J(all detects) UJ(all non-detects)

Method: 8081A
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P03640AQ240822A (DUP02 -SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	ALPHA-BHC gamma-BHC (Lindane)	33 42	- -	38.00-130.00 46.00-127.00	- -	ALPHA-BHC gamma-BHC (Lindane)	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
P10043AQ241220A (DUP02 -SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	DINOSEB	8	-	10.00-136.00	-	DINOSEB	J(all detects) R(all non-detects)

Method: 6020
Matrix: SO

QC Sample ID (Associated Samples)	Compound	LCS %R	LCSD %R	%R Limits	RPD (Limits)	Affected Compounds	Flag
P35726BQ220958A (DUP02 -SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	ANTIMONY	63	-	80.00-120.00	-	ANTIMONY	No Qual SRM within QC limits

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: DE050 **Laboratory: LL**

EDD Filename: DE050_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*
P3LJLCSQ262221 (DUP02 -SIV-QC-122110 SED -002-SIV-SD-0.0-0.5 SED -015-SIV-SD-0.0-0.5 SED -036-SIV-SD-0.0-0.5 SED -038-SIV-SD-0.0-0.5 SED -039-SIV-SD-0.0-0.5)	PENTACHLOROPHENOL	111	-	35.00-106.00	-	PENTACHLOROPHENOL	J(all detects)

Surrogate Outlier Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8081A
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP02-SIV-QC-122110	TETRACHLORO-M-XYLENE	46	50.00-130.00	All Target Analytes	J (all detects) UJ (all non-detects)
SED-036-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	149	20.00-120.00	All Target Analytes	J(all detects)

Method: 8082
Matrix: SO

Sample ID	Surrogate	Sample % Recovery	% Recovery Limits	Affected Compounds	Flag
DUP02-SIV-QC-122110	DECACHLOROBIPHENYL	130	45.00-120.00	All Target Analytes	J(all detects)
SED-002-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	124	45.00-120.00	All Target Analytes	J(all detects)
SED-015-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	129	45.00-120.00	All Target Analytes	J(all detects)
SED-036-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL	141	45.00-120.00	All Target Analytes	J(all detects)
SED-039-SIV-SD-0.0-0.5	DECACHLOROBIPHENYL TETRACHLORO-M-XYLENE	205 172	45.00-120.00 53.00-139.00	All Target Analytes	J(all detects)

Field Duplicate RPD Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 160.3M
Matrix: SO

Analyte	Concentration (%)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
MOISTURE	16.4	15.9	3		No Qualifiers Applied

Method: 300.0
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
FLUORIDE	1.1	1.2 U	200	50.00	J(all detects) UJ(all non-detects)

Method: 6010B
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
ALUMINUM	14600	13700	6	50.00	
BORON	4.65	4.68	1	50.00	
CALCIUM	2940	2800	5	50.00	
IRON	22100	20400	8	50.00	
LITHIUM	29.2	26.9	8	50.00	
MAGNESIUM	6260	5760	8	50.00	
MANGANESE	332	300	10	50.00	
PHOSPHORUS	501	487	3	50.00	No Qualifiers Applied
POTASSIUM	3940	3540	11	50.00	
SODIUM	74.9	70.3	6	50.00	
STRONTIUM	13.6	13.3	2	50.00	
TIN	2.11	2.02	4	50.00	
TITANIUM	1360	1260	8	50.00	
Zirconium	4.42	3.82	15	50.00	

Method: 6020
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
ANTIMONY	0.111	0.0806	32	50.00	
ARSENIC	6.18	6.94	12	50.00	
BARIUM	104	112	7	50.00	
BERYLLIUM	0.574	0.565	2	50.00	
CADMIUM	0.233	0.239	3	50.00	
CHROMIUM	20.4	22.0	8	50.00	
COBALT	5.89	6.50	10	50.00	
COPPER	8.69	9.16	5	50.00	
LEAD	10.0	10.3	3	50.00	No Qualifiers Applied
MOLYBDENUM	0.457	0.545	18	50.00	
NICKEL	12.1	13.1	8	50.00	
SELENIUM	0.153	0.131	15	50.00	
SILVER	0.0286	0.0362	23	50.00	
THALLIUM	0.296	0.282	5	50.00	
VANADIUM	42.4	45.8	8	50.00	
ZINC	70.9	82.1	15	50.00	

Field Duplicate RPD Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 7199
Matrix: SO

Analyte	Concentration (mg/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
HEXAVALENT CHROMIUM	0.25	0.31	21	50.00	No Qualifiers Applied

Method: 8082
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
AROCLOR 1260	0.65	0.68	5	50.00	No Qualifiers Applied
Aroclor 5460	1.3	1.9	37	50.00	

Method: 8151A
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
2,4,5-TP (Silvex)	0.20 U	0.18	200	50.00	J(all detects) UJ(all non-detects)
DICAMBA	1.4 U	1.2	200	50.00	
DICHLOROPROP	2.0 U	0.96	200	50.00	

Method: 8270C SIM
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
BENZO(B)FLUORANTHENE	1.3	1.5	14	50.00	No Qualifiers Applied
CHRYSENE	0.90	1.1	20	50.00	
FLUORANTHENE	1.1	1.6	37	50.00	
NAPHTHALENE	2.6	2.4	8	50.00	
PHENANTHRENE	0.93	1.1	17	50.00	
PYRENE	1.3	1.1	17	50.00	
ACENAPHTHYLENE	2.0 U	0.47	200	50.00	J(all detects) UJ(all non-detects)

Method: 8270C
Matrix: SO

Analyte	Concentration (ug/Kg)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
BIS(2-ETHYLHEXYL)PHTHALATE	45	87	64	50.00	J(all detects)

Method: 9045M
Matrix: SO

Analyte	Concentration (pH unit)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
PH	6.51	6.52	0	50.00	No Qualifiers Applied

Field Duplicate RPD Report

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: ASTM D1498
Matrix: SO

Analyte	Concentration (mV)		Sample RPD	eQAPP RPD	Flag
	SED-002-SIV-SD-0.0-0.5	DUP02-SIV-QC-122110			
Oxidation Reduction Potential	536	522	3		No Qualifiers Applied

Reporting Limit Outliers

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 300.0

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-002-SIV-SD-0.0-0.5	FLUORIDE	J	1.1	1.2	PQL	mg/Kg	J (all detects)
SED-015-SIV-SD-0.0-0.5	FLUORIDE	J	1.2	1.3	PQL	mg/Kg	J (all detects)

Method: 6010B

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	BORON	J	4.68	5.66	PQL	mg/Kg	J (all detects)
	SODIUM	J	70.3	113	PQL	mg/Kg	
	TIN	J	2.02	11.3	PQL	mg/Kg	
	Zirconium	J	3.82	5.66	PQL	mg/Kg	
SED-002-SIV-SD-0.0-0.5	BORON	J	4.65	5.70	PQL	mg/Kg	J (all detects)
	SODIUM	J	74.9	114	PQL	mg/Kg	
	TIN	J	2.11	11.4	PQL	mg/Kg	
	Zirconium	J	4.42	5.70	PQL	mg/Kg	
SED-015-SIV-SD-0.0-0.5	BORON	J	5.34	6.38	PQL	mg/Kg	J (all detects)
	SODIUM	J	72.3	128	PQL	mg/Kg	
	TIN	J	2.15	12.8	PQL	mg/Kg	
	Zirconium	J	2.32	6.38	PQL	mg/Kg	
SED-036-SIV-SD-0.0-0.5	SODIUM	J	93.5	126	PQL	mg/Kg	J (all detects)
	TIN	J	3.30	12.6	PQL	mg/Kg	
	Zirconium	J	5.96	6.32	PQL	mg/Kg	
SED-038-SIV-SD-0.0-0.5	BORON	J	4.94	5.72	PQL	mg/Kg	J (all detects)
	SODIUM	J	61.9	114	PQL	mg/Kg	
	TIN	J	2.03	11.4	PQL	mg/Kg	
	Zirconium	J	2.81	5.72	PQL	mg/Kg	
SED-039-SIV-SD-0.0-0.5	BORON	J	3.97	6.50	PQL	mg/Kg	J (all detects)
	SODIUM	J	59.6	130	PQL	mg/Kg	
	TIN	J	2.30	13.0	PQL	mg/Kg	
	Zirconium	J	2.19	6.50	PQL	mg/Kg	

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	ANTIMONY	J	0.0806	0.229	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.131	0.457	PQL	mg/Kg	
	SILVER	J	0.0362	0.114	PQL	mg/Kg	
SED-002-SIV-SD-0.0-0.5	ANTIMONY	J	0.111	0.235	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.153	0.469	PQL	mg/Kg	
	SILVER	J	0.0286	0.117	PQL	mg/Kg	
SED-015-SIV-SD-0.0-0.5	ANTIMONY	J	0.0859	0.258	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.188	0.516	PQL	mg/Kg	
	SILVER	J	0.0473	0.129	PQL	mg/Kg	
SED-036-SIV-SD-0.0-0.5	ANTIMONY	J	0.203	0.248	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.490	0.496	PQL	mg/Kg	
SED-038-SIV-SD-0.0-0.5	ANTIMONY	J	0.0951	0.224	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.161	0.449	PQL	mg/Kg	
	SILVER	J	0.0475	0.112	PQL	mg/Kg	

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

Reporting Limit Outliers

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 6020

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-039-SIV-SD-0.0-0.5	CADMIUM	J	0.125	0.129	PQL	mg/Kg	J (all detects)
	SELENIUM	J	0.136	0.515	PQL	mg/Kg	
	SILVER	J	0.0238	0.129	PQL	mg/Kg	

Method: 7199

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	HEXAVALENT CHROMIUM	J	0.31	1.2	PQL	mg/Kg	J (all detects)
SED-002-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.25	1.2	PQL	mg/Kg	J (all detects)
SED-036-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.43	1.3	PQL	mg/Kg	J (all detects)
SED-039-SIV-SD-0.0-0.5	HEXAVALENT CHROMIUM	J	0.29	1.3	PQL	mg/Kg	J (all detects)

Method: 7471A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-015-SIV-SD-0.0-0.5	MERCURY	J	0.0053	0.127	PQL	mg/Kg	J (all detects)
SED-036-SIV-SD-0.0-0.5	MERCURY	J	0.0109	0.118	PQL	mg/Kg	J (all detects)
SED-038-SIV-SD-0.0-0.5	MERCURY	J	0.0059	0.114	PQL	mg/Kg	J (all detects)

Method: 8081A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-015-SIV-SD-0.0-0.5	DELTA-BHC	J	0.11	0.22	PQL	ug/Kg	J (all detects)
	HEPTACHLOR	J	0.11	0.22	PQL	ug/Kg	
SED-039-SIV-SD-0.0-0.5	ALDRIN	J	0.13	0.22	PQL	ug/Kg	J (all detects)
	gamma-BHC (Lindane)	J	0.16	0.22	PQL	ug/Kg	

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	AROCLOR 1260	J	0.68	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.9	3.9	PQL	ug/Kg	
SED-002-SIV-SD-0.0-0.5	AROCLOR 1260	J	0.65	2.0	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.3	3.9	PQL	ug/Kg	
SED-015-SIV-SD-0.0-0.5	AROCLOR 1260	J	0.71	2.2	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	1.6	4.3	PQL	ug/Kg	
SED-036-SIV-SD-0.0-0.5	AROCLOR 1260	J	0.77	2.1	PQL	ug/Kg	J (all detects)

Reporting Limit Outliers

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: 8082

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-038-SIV-SD-0.0-0.5	AROCLOR 1260	J	1.0	1.9	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.8	3.8	PQL	ug/Kg	
SED-039-SIV-SD-0.0-0.5	AROCLOR 1260	J	1.3	2.3	PQL	ug/Kg	J (all detects)
	Aroclor 5460	J	2.1	4.4	PQL	ug/Kg	

Method: 8151A

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	2,4,5-TP (Silvex)	J	0.18	0.20	PQL	ug/Kg	J (all detects)
	DICAMBA	J	1.2	1.4	PQL	ug/Kg	
	DICHLOROPROP	J	0.96	2.0	PQL	ug/Kg	
SED-038-SIV-SD-0.0-0.5	2,4-D	J	3.0	4.1	PQL	ug/Kg	J (all detects)

Method: 8270C

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	BIS(2-ETHYLHEXYL)PHTHALATE	J	87	400	PQL	ug/Kg	J (all detects)
SED-002-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	45	400	PQL	ug/Kg	J (all detects)
SED-015-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	67	430	PQL	ug/Kg	J (all detects)
SED-036-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	48	420	PQL	ug/Kg	J (all detects)
	Butylbenzylphthalate	J	56	210	PQL	ug/Kg	
SED-038-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	30	380	PQL	ug/Kg	J (all detects)
SED-039-SIV-SD-0.0-0.5	BIS(2-ETHYLHEXYL)PHTHALATE	J	33	440	PQL	ug/Kg	J (all detects)

Method: 8270C SIM

Matrix: SO

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
DUP02-SIV-QC-122110	ACENAPHTHYLENE	J	0.47	2.0	PQL	ug/Kg	J (all detects)
	BENZO(B)FLUORANTHENE	J	1.5	2.0	PQL	ug/Kg	
	CHRYSENE	J	1.1	2.0	PQL	ug/Kg	
	FLUORANTHENE	J	1.6	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	1.1	2.0	PQL	ug/Kg	
	PYRENE	J	1.1	2.0	PQL	ug/Kg	
SED-002-SIV-SD-0.0-0.5	BENZO(B)FLUORANTHENE	J	1.3	2.0	PQL	ug/Kg	J (all detects)
	CHRYSENE	J	0.90	2.0	PQL	ug/Kg	
	FLUORANTHENE	J	1.1	2.0	PQL	ug/Kg	
	PHENANTHRENE	J	0.93	2.0	PQL	ug/Kg	
	PYRENE	J	1.3	2.0	PQL	ug/Kg	

Reporting Limit Outliers

Lab Reporting Batch ID: DE050 **Laboratory: LL**

EDD Filename: DE050_v1 **eQAPP Name: CDM_SSFL_110509**

Method: **8270C SIM**

Matrix: **SO**

SampleID	Analyte	Lab Qual	Result	Reporting Limit	RL Type	Units	Flag
SED-015-SIV-SD-0.0-0.5	1-METHYLNAPHTHALENE	J	1.8	2.2	PQL	ug/Kg	J (all detects)
	ACENAPHTHYLENE	J	0.47	2.2	PQL	ug/Kg	
	BENZO(B)FLUORANTHENE	J	1.8	2.2	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.1	2.2	PQL	ug/Kg	
	CHRYSENE	J	1.9	2.2	PQL	ug/Kg	
	FLUORANTHENE	J	1.9	2.2	PQL	ug/Kg	
	PYRENE	J	1.5	2.2	PQL	ug/Kg	
SED-036-SIV-SD-0.0-0.5	ACENAPHTHYLENE	J	0.46	2.1	PQL	ug/Kg	J (all detects)
	BENZO(A)PYRENE	J	1.1	2.1	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	0.96	2.1	PQL	ug/Kg	
	CHRYSENE	J	1.4	2.1	PQL	ug/Kg	
	FLUORANTHENE	J	2.0	2.1	PQL	ug/Kg	
	NAPHTHALENE	J	1.9	2.1	PQL	ug/Kg	
	PHENANTHRENE	J	1.4	2.1	PQL	ug/Kg	
	PYRENE	J	1.5	2.1	PQL	ug/Kg	
SED-038-SIV-SD-0.0-0.5	ANTHRACENE	J	0.39	1.9	PQL	ug/Kg	J (all detects)
	BENZO(A)ANTHRACENE	J	1.2	1.9	PQL	ug/Kg	
	BENZO(A)PYRENE	J	1.3	1.9	PQL	ug/Kg	
	BENZO(K)FLUORANTHENE	J	1.3	1.9	PQL	ug/Kg	
	Di-n-butylphthalate	J	15	21	PQL	ug/Kg	
	NAPHTHALENE	J	1.5	1.9	PQL	ug/Kg	
SED-039-SIV-SD-0.0-0.5	BENZO(A)PYRENE	J	1.1	2.2	PQL	ug/Kg	J (all detects)
	BENZO(K)FLUORANTHENE	J	0.91	2.2	PQL	ug/Kg	
	Butylbenzylphthalate	J	17	24	PQL	ug/Kg	
	FLUORANTHENE	J	2.0	2.2	PQL	ug/Kg	
	FLUORENE	J	2.0	2.2	PQL	ug/Kg	
	NAPHTHALENE	J	1.7	2.2	PQL	ug/Kg	
	PHENANTHRENE	J	1.6	2.2	PQL	ug/Kg	
	PYRENE	J	1.4	2.2	PQL	ug/Kg	

LDC #: 25550F4

VALIDATION FINDINGS WORKSHEET
Sample Specific Element Reference

Page: 1 of 1
Reviewer: CR
2nd reviewer:

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
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, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
		Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mo, Mn, Hg, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn, Zr
Analysis Method		
ICP		Al, B, Ca, Fe, Li, Mg, Mn, P, K, Na, Sr, Sn, Ti, Zr
ICP-MS		Sb, As, Ba, Be, Cd, Cr, Co, Cu, Pb, Mo, Ni, Se, Ag, Tl, V, Zn

Comments: Mercury by CVAA if performed

LDC #: 25550F4 **VALIDATION COMPLETENESS WORKSHEET** Date: 6/4/11
SDG #: DE050 ADR Page: 1 of 1
Laboratory: Lancaster Laboratories Reviewer: AL
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	CCB hits but no data qualified
V.	ICP Interference Check Sample (ICS) Analysis	N	
VI.	Matrix Spike Analysis	N	MS/D (Al, Ca, Fe, Mg, Mn, P, Ti, Zn, Ba) 4x
VII.	Duplicate Sample Analysis	N	D.P (As < 5x)
VIII.	Laboratory Control Samples (LCS)	N	LCS
IX.	Internal Standard (ICP-MS)	N	
X.	Furnace Atomic Absorption QC	N	
XI.	ICP Serial Dilution	SW	Co: 11%, Ni: 16% : J/UJ/A (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:

1	DUP02-SIV-QC-122110	11		21		31	
2	SED-002-SIV-SD-0.0-0.5	12		22		32	
3	SED-015-SIV-SD-0.0-0.5	13		23		33	
4	SED-036-SIV-SD-0.0-0.5	14		24		34	
5	SED-038-SIV-SD-0.0-0.5	15		25		35	
6	SED-039-SIV-SD-0.0-0.5	16		26		36	
7	SED-002-SIV-SD-0.0-0.5MS	17		27		37	
8	SED-002-SIV-SD-0.0-0.5MSD	18		28		38	
9	SED-002-SIV-SD-0.0-0.5DUP	19		29		39	
10		20		30		40	

Notes:

SAMPLE DELIVERY GROUP

DE051

Attachment I

Sample ID Cross Reference and Data Review Level

Sample Cross Reference

Date Collected	Field Sample ID	Lab Sample ID	Sample Type	Prep Method	Analytical Method	Review Level
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3050B	6010B	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3050B	6020	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3060A	7199	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3550B	8081A	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3550B	8082	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3550B	8151A	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3550B	8270C	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	3550B	8270C SIM	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	Gen Prep	9045M	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	METHOD	300.0	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	METHOD	314.0	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	METHOD	6850	III
22-Dec-2010	SL-101-SA5B-SS-0.0-0.5	6173164	N	METHOD	7471A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3050B	6010B	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3050B	6020	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3060A	7199	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3550B	8081A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3550B	8082	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3550B	8151A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3550B	8270C	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	3550B	8270C SIM	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	Gen Prep	9045M	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	METHOD	300.0	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	METHOD	314.0	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5	6173167	N	METHOD	7471A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	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
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3050B	6020	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3060A	7199	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3550B	8081A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3550B	8082	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3550B	8151A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3550B	8270C	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	3550B	8270C SIM	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	METHOD	300.0	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	METHOD	314.0	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	6173168	MS	METHOD	7471A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3050B	6010B	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3050B	6020	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3550B	8081A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3550B	8082	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3550B	8151A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3550B	8270C	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	3550B	8270C SIM	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MSD	6173169	MSD	METHOD	7471A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	3050B	6010B	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	3050B	6020	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	3060A	7199	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	Gen Prep	9045M	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	METHOD	300.0	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	METHOD	314.0	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	6173170	DUP	METHOD	7471A	III
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5DUP	P173167D271322B	DUP	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
22-Dec-2010	SL-100-SA5B-SS-0.0-0.5MS	P173167R271336B	MS	METHOD	300.0	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3050B	6010B	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3050B	6020	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3060A	7199	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3550B	8081A	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3550B	8082	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3550B	8151A	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3550B	8270C	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	3550B	8270C SIM	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	Gen Prep	9045M	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	METHOD	300.0	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	METHOD	314.0	III
22-Dec-2010	DUP10-SA5B-QC-122210	6173160	FD	METHOD	7471A	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3050B	6010B	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3050B	6020	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3060A	7199	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3546	1625C	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8015B	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8015M	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8081A	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8082	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8151A	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8270C	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	3550B	8270C SIM	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	5035	8015M	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	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
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	5035	8260B SIM	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	8330	8330A	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	Gen Prep	9045M	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	300.0	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	314.0	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	7471A	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	8015B	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	8015M	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	8315A	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5	6173166	N	METHOD	9012B	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5DUP	P173166D271131A	DUP	METHOD	314.0	III
22-Dec-2010	SL-118-SA5B-SS-0.0-0.5MS	P173166R271154A	MS	METHOD	314.0	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3050B	6010B	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3050B	6020	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3060A	7199	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3546	1625C	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8015B	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8015M	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8081A	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8082	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8151A	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8270C	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	3550B	8270C SIM	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	5035	8015M	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	5035	8260B	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	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
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	8330	8330A	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	Gen Prep	9045M	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	300.0	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	314.0	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	7471A	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	8015B	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	8015M	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	8315A	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5	6173171	N	METHOD	9012B	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5MSD	P173171M322217A	MSD	METHOD	8015M	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5MSD	P173171M322347A	MSD	METHOD	8015B	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5MS	P173171R322201A	MS	METHOD	8015M	III
22-Dec-2010	SL-114-SA5B-SS-0.0-0.5MS	P173171R322332A	MS	METHOD	8015B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3050B	6010B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3050B	6020	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3060A	7199	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3546	1625C	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8015B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8015M	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8081A	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8082	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8151A	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8270C	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	3550B	8270C SIM	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	5035	8015M	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	5035	8260B	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
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	5035	8260B SIM	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	8330	8330A	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	Gen Prep	9045M	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	300.0	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	314.0	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	7471A	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	8015B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	8015M	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	8315A	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5	6173165	N	METHOD	9012B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5DUP	P173165D271905A	DUP	METHOD	9012B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5MS	P173165R211839A	MS	5035	8260B	III
22-Dec-2010	SL-117-SA5B-SS-0.0-0.5MS	P173165R271906A	MS	METHOD	9012B	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3050B	6010B	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3050B	6020	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3060A	7199	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3550B	8081A	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3550B	8082	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3550B	8151A	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3550B	8270C	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	3550B	8270C SIM	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	Gen Prep	9045M	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	METHOD	300.0	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	METHOD	314.0	III
22-Dec-2010	SL-102-SA5B-SS-0.0-0.5	6173172	N	METHOD	7471A	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3050B	6010B	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
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3050B	6020	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3060A	7199	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3550B	8081A	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3550B	8082	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3550B	8151A	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3550B	8270C	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	3550B	8270C SIM	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	Gen Prep	9045M	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	METHOD	300.0	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	METHOD	314.0	III
22-Dec-2010	SL-024-SA5B-SS-0.0-0.5	6173173	N	METHOD	7471A	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3050B	6010B	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3050B	6020	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3060A	7199	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3550B	8081A	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3550B	8082	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3550B	8151A	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3550B	8270C	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	3550B	8270C SIM	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	Gen Prep	9045M	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	METHOD	300.0	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	METHOD	314.0	III
22-Dec-2010	SED-010-SIV-SD-0.0-0.5	6173163	N	METHOD	7471A	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	3050B	6010B	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	3050B	6020	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	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
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	3550B	8082	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	3550B	8270C	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	3550B	8270C SIM	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	5035	8260B	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	5035	8260B SIM	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	Gen Prep	9045M	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	METHOD	300.0	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	METHOD	314.0	III
22-Dec-2010	SL-157-SA5B-SB-4.0-5.0	6173174	N	METHOD	7471A	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	3050B	6010B	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	3050B	6020	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	3060A	7199	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	3550B	8082	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	3550B	8270C	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	3550B	8270C SIM	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	Gen Prep	9045M	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	METHOD	300.0	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	METHOD	314.0	III
22-Dec-2010	SL-157-SA5B-SB-9.0-10.0	6173176	N	METHOD	7471A	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	3005A	6010B	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	3020A	6020	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	3510C	8081A	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	3510C	8082	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	3510C	8270C	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	3510C	8270C SIM	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	Gen Prep	300.0	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
22-Dec-2010	EB08-SA5B-122210	6173161	EB	Gen Prep	314.0	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	Gen Prep	7199	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	METHOD	7470A	III
22-Dec-2010	EB08-SA5B-122210	6173161	EB	METHOD	8151A	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	3050B	6010B	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	3050B	6020	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	3060A	7199	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	3550B	8082	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	3550B	8270C	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	3550B	8270C SIM	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	5035	8260B	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	5035	8260B SIM	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	Gen Prep	9045M	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	METHOD	300.0	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	METHOD	314.0	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	METHOD	6850	III
22-Dec-2010	SL-158-SA5B-SB-4.0-5.0	6173175	N	METHOD	7471A	III
22-Dec-2010	TB-122210	6173178	TB	5030B	8015M	III
22-Dec-2010	TB-122210	6173178	TB	5030B	8260B	III
22-Dec-2010	TB-122210	6173178	TB	5030B	8260B SIM	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3005A	6010B	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3020A	6020	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3510C	8015B	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3510C	8015M	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3510C	8081A	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3510C	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
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3510C	8270C	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3510C	8270C SIM	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	3520C	1625C	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	5030B	8015M	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	5030B	8260B	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	5030B	8260B SIM	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	8330	8330A	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	Gen Prep	300.0	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	Gen Prep	314.0	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	Gen Prep	7199	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	Gen Prep	8015B	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	Gen Prep	8015M	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	METHOD	7470A	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	METHOD	8151A	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	METHOD	8315A	III
22-Dec-2010	FB06-SA5B-122210	6173162	FB	METHOD	9012B	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3050B	6010B	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3050B	6020	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3060A	7199	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3546	1625C	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3550B	8015B	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3550B	8015M	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3550B	8082	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3550B	8270C	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	3550B	8270C SIM	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	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
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	5035	8260B	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	5035	8260B SIM	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	8330	8330A	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	Gen Prep	9045M	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	300.0	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	314.0	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	7471A	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	8015B	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	8015M	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	8315A	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0	6173177	N	METHOD	9012B	III
22-Dec-2010	SL-145-SA5B-SB-4.0-5.0DUP	P173177D291230B	DUP	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*

Attachment II

Overall Data Qualification Summary

Data Qualifier Summary

Lab Reporting Batch ID: DE051 **Laboratory: LL**

EDD Filename: PrepDE051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: GENCHEM

Method: 300.0 **Matrix: SO**

Sample ID: SL-024-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 10:01:00 *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		1.0	MDL	1.3	PQL	mg/Kg	J	Q

Sample ID: SL-100-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 9:02:00 *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

Sample ID: SL-102-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 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	1.3		0.90	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-114-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 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	1.3		1.0	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-118-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
FLUORIDE	1.8		0.94	MDL	1.2	PQL	mg/Kg	J	Q

Sample ID: SL-145-SA5B-SB-4.0-5.0 *Collected:* 12/22/2010 2:54:00 *Analysis Type:* RES *Dilution:* 1

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

Sample ID: SL-157-SA5B-SB-4.0-5.0 *Collected:* 12/22/2010 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
FLUORIDE	3.7		0.88	MDL	1.1	PQL	mg/Kg	J	Q

Sample ID: SL-157-SA5B-SB-9.0-10.0 *Collected:* 12/22/2010 10:52:00 *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		0.89	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: DE051 **Laboratory:** LL

EDD Filename: PrepDE051_v1 **eQAPP Name:** CDM_SSFL_110509

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

Sample ID: SL-158-SA5B-SB-4.0-5.0 *Collected:* 12/22/2010 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
FLUORIDE	1.4		0.89	MDL	1.1	PQL	mg/Kg	J	Q

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

Sample ID: EB08-SA5B-122210 *Collected:* 12/22/2010 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
IRON	0.0640	J	0.0522	MDL	0.200	PQL	mg/L	J	Z

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

Sample ID: DUP10-SA5B-QC-122210 *Collected:* 12/22/2010 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
BORON	4.36	J	1.00	MDL	5.62	PQL	mg/Kg	J	Z
CALCIUM	3070		6.90	MDL	22.5	PQL	mg/Kg	J	E, FD
IRON	18600		5.30	MDL	22.5	PQL	mg/Kg	J	E
MAGNESIUM	4260		2.86	MDL	11.2	PQL	mg/Kg	J	E
PHOSPHORUS	361		0.630	MDL	11.2	PQL	mg/Kg	J	Q
POTASSIUM	2800		20.2	MDL	56.2	PQL	mg/Kg	J	Q
SODIUM	92.3	J	42.0	MDL	112	PQL	mg/Kg	J	Z
STRONTIUM	18.7		0.0697	MDL	0.562	PQL	mg/Kg	J	E
TIN	2.22	J	1.12	MDL	11.2	PQL	mg/Kg	J	Z
Zirconium	1.88	J	0.945	MDL	5.62	PQL	mg/Kg	J	Z

Sample ID: SED-010-SIV-SD-0.0-0.5 *Collected:* 12/22/2010 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
CALCIUM	4260		7.27	MDL	23.7	PQL	mg/Kg	J	E
IRON	15400		5.58	MDL	23.7	PQL	mg/Kg	J	E
MAGNESIUM	3720		3.01	MDL	11.9	PQL	mg/Kg	J	E
PHOSPHORUS	378		0.664	MDL	11.9	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: DE051 **Laboratory:** LL

EDD Filename: PrepDE051_v1 **eQAPP Name:** CDM_SSFL_110509

Method Category: METALS

Method: 6010B **Matrix:** SO

Sample ID: SED-010-SIV-SD-0.0-0.5 *Collected:* 12/22/2010 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
POTASSIUM	2890		21.3	MDL	59.3	PQL	mg/Kg	J	Q
SODIUM	56.7	J	44.2	MDL	119	PQL	mg/Kg	J	Z
STRONTIUM	13.2		0.0735	MDL	0.593	PQL	mg/Kg	J	E
TIN	2.40	J	1.19	MDL	11.9	PQL	mg/Kg	J	Z

Sample ID: SL-024-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 10:01:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	4.85	J	1.07	MDL	6.02	PQL	mg/Kg	J	Z
CALCIUM	4630		7.39	MDL	24.1	PQL	mg/Kg	J	E
IRON	20000		5.68	MDL	24.1	PQL	mg/Kg	J	E
MAGNESIUM	4210		3.06	MDL	12.0	PQL	mg/Kg	J	E
PHOSPHORUS	362		0.675	MDL	12.0	PQL	mg/Kg	J	Q
POTASSIUM	2720		21.7	MDL	60.2	PQL	mg/Kg	J	Q
SODIUM	104	J	44.9	MDL	120	PQL	mg/Kg	J	Z
STRONTIUM	23.2		0.0747	MDL	0.602	PQL	mg/Kg	J	E
TIN	2.26	J	1.20	MDL	12.0	PQL	mg/Kg	J	Z
Zirconium	2.14	J	1.01	MDL	6.02	PQL	mg/Kg	J	Z

Sample ID: SL-100-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 9:02:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.13	J	1.01	MDL	5.69	PQL	mg/Kg	J	Z
CALCIUM	5190		6.98	MDL	22.8	PQL	mg/Kg	J	E, FD
IRON	21000		5.36	MDL	22.8	PQL	mg/Kg	J	E
MAGNESIUM	4940		2.89	MDL	11.4	PQL	mg/Kg	J	E
PHOSPHORUS	423		0.638	MDL	11.4	PQL	mg/Kg	J	Q
POTASSIUM	3050		20.5	MDL	56.9	PQL	mg/Kg	J	Q
SODIUM	95.5	J	42.5	MDL	114	PQL	mg/Kg	J	Z
STRONTIUM	25.6		0.0706	MDL	0.569	PQL	mg/Kg	J	E
TIN	2.26	J	1.14	MDL	11.4	PQL	mg/Kg	J	Z
Zirconium	3.01	J	0.956	MDL	5.69	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: DE051 **Laboratory: LL**

EDD Filename: PrepDE051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-101-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 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
BORON	5.41	J	1.01	MDL	5.66	PQL	mg/Kg	J	Z
CALCIUM	3030		6.94	MDL	22.7	PQL	mg/Kg	J	E
IRON	25400		5.33	MDL	22.7	PQL	mg/Kg	J	E
MAGNESIUM	4660		2.88	MDL	11.3	PQL	mg/Kg	J	E
PHOSPHORUS	256		0.634	MDL	11.3	PQL	mg/Kg	J	Q
POTASSIUM	3240		20.4	MDL	56.6	PQL	mg/Kg	J	Q
STRONTIUM	28.5		0.0702	MDL	0.566	PQL	mg/Kg	J	E
TIN	2.50	J	1.13	MDL	11.3	PQL	mg/Kg	J	Z
Zirconium	2.40	J	0.951	MDL	5.66	PQL	mg/Kg	J	Z

Sample ID: SL-102-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 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
BORON	4.70	J	0.967	MDL	5.43	PQL	mg/Kg	J	Z
CALCIUM	4940		6.66	MDL	21.7	PQL	mg/Kg	J	E
IRON	21000		5.12	MDL	21.7	PQL	mg/Kg	J	E
MAGNESIUM	4600		2.76	MDL	10.9	PQL	mg/Kg	J	E
PHOSPHORUS	344		0.608	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	3290		19.6	MDL	54.3	PQL	mg/Kg	J	Q
STRONTIUM	24.5		0.0674	MDL	0.543	PQL	mg/Kg	J	E
TIN	2.27	J	1.09	MDL	10.9	PQL	mg/Kg	J	Z
Zirconium	2.04	J	0.913	MDL	5.43	PQL	mg/Kg	J	Z

Sample ID: SL-114-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 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
CALCIUM	27500		7.64	MDL	24.9	PQL	mg/Kg	J	E
IRON	22700		5.87	MDL	24.9	PQL	mg/Kg	J	E
MAGNESIUM	6260		3.17	MDL	12.5	PQL	mg/Kg	J	E
PHOSPHORUS	534		0.698	MDL	12.5	PQL	mg/Kg	J	Q
POTASSIUM	4650		22.4	MDL	62.3	PQL	mg/Kg	J	Q
STRONTIUM	58.9		0.0773	MDL	0.623	PQL	mg/Kg	J	E
TIN	2.21	J	1.25	MDL	12.5	PQL	mg/Kg	J	Z
Zirconium	1.94	J	1.05	MDL	6.23	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: DE051 **Laboratory: LL**

EDD Filename: PrepDE051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-117-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 9:25:00 *Analysis Type:* REA *Dilution:* 5

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	71800		37.7	MDL	123	PQL	mg/Kg	J	E

Sample ID: SL-117-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 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
IRON	28500		5.79	MDL	24.6	PQL	mg/Kg	J	E
MAGNESIUM	7560		3.12	MDL	12.3	PQL	mg/Kg	J	E
PHOSPHORUS	640		0.688	MDL	12.3	PQL	mg/Kg	J	Q
POTASSIUM	5740		22.1	MDL	61.4	PQL	mg/Kg	J	Q
STRONTIUM	114		0.0762	MDL	0.614	PQL	mg/Kg	J	E
TIN	2.05	J	1.23	MDL	12.3	PQL	mg/Kg	J	Z
Zirconium	2.97	J	1.03	MDL	6.14	PQL	mg/Kg	J	Z

Sample ID: SL-118-SA5B-SS-0.0-0.5 *Collected:* 12/22/2010 9:10:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	5.79	J	1.04	MDL	5.84	PQL	mg/Kg	J	Z
CALCIUM	22300		7.16	MDL	23.4	PQL	mg/Kg	J	E
IRON	12400		5.50	MDL	23.4	PQL	mg/Kg	J	E
MAGNESIUM	3230		2.97	MDL	11.7	PQL	mg/Kg	J	E
PHOSPHORUS	391		0.654	MDL	11.7	PQL	mg/Kg	J	Q
POTASSIUM	2470		21.0	MDL	58.4	PQL	mg/Kg	J	Q
SODIUM	72.7	J	43.6	MDL	117	PQL	mg/Kg	J	Z
STRONTIUM	46.2		0.0724	MDL	0.584	PQL	mg/Kg	J	E
TIN	1.61	J	1.17	MDL	11.7	PQL	mg/Kg	J	Z
Zirconium	1.94	J	0.981	MDL	5.84	PQL	mg/Kg	J	Z

Sample ID: SL-145-SA5B-SB-4.0-5.0 *Collected:* 12/22/2010 2:54:00 *Analysis Type:* RES *Dilution:* 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
CALCIUM	2780		6.68	MDL	21.8	PQL	mg/Kg	J	E
IRON	23900		5.13	MDL	21.8	PQL	mg/Kg	J	E
MAGNESIUM	4170		2.77	MDL	10.9	PQL	mg/Kg	J	E
PHOSPHORUS	246		0.610	MDL	10.9	PQL	mg/Kg	J	Q
POTASSIUM	2180		19.6	MDL	54.5	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: DE051 **Laboratory: LL**

EDD Filename: PrepDE051_v1 **eQAPP Name: CDM_SSFL_110509**

Method Category: METALS

Method: 6010B **Matrix: SO**

Sample ID: SL-145-SA5B-SB-4.0-5.0 ***Collected:*** 12/22/2010 2:54:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
STRONTIUM	25.8		0.0676	MDL	0.545	PQL	mg/Kg	J	E
TIN	1.77	J	1.09	MDL	10.9	PQL	mg/Kg	J	Z
Zirconium	2.17	J	0.915	MDL	5.45	PQL	mg/Kg	J	Z

Sample ID: SL-157-SA5B-SB-4.0-5.0 ***Collected:*** 12/22/2010 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
BORON	3.70	J	0.930	MDL	5.23	PQL	mg/Kg	J	Z
CALCIUM	2180		6.41	MDL	20.9	PQL	mg/Kg	J	E
IRON	19000		4.92	MDL	20.9	PQL	mg/Kg	J	E
MAGNESIUM	4010		2.66	MDL	10.5	PQL	mg/Kg	J	E
PHOSPHORUS	391		0.585	MDL	10.5	PQL	mg/Kg	J	Q
POTASSIUM	2800		18.8	MDL	52.3	PQL	mg/Kg	J	Q
STRONTIUM	14.9		0.0648	MDL	0.523	PQL	mg/Kg	J	E
TIN	2.24	J	1.05	MDL	10.5	PQL	mg/Kg	J	Z
Zirconium	1.84	J	0.878	MDL	5.23	PQL	mg/Kg	J	Z

Sample ID: SL-157-SA5B-SB-9.0-10.0 ***Collected:*** 12/22/2010 10:52:00 ***Analysis Type:*** RES ***Dilution:*** 1

Analyte	Lab Result	Lab Qual	DL	DL Type	RL	RL Type	Units	Data Review Qual	Reason Code
BORON	3.90	J	0.982	MDL	5.52	PQL	mg/Kg	J	Z
CALCIUM	2050		6.77	MDL	22.1	PQL	mg/Kg	J	E
IRON	17900		5.20	MDL	22.1	PQL	mg/Kg	J	E
MAGNESIUM	3380		2.80	MDL	11.0	PQL	mg/Kg	J	E
PHOSPHORUS	246		0.618	MDL	11.0	PQL	mg/Kg	J	Q
POTASSIUM	2390		19.9	MDL	55.2	PQL	mg/Kg	J	Q
SODIUM	96.7	J	41.2	MDL	110	PQL	mg/Kg	J	Z
STRONTIUM	19.5		0.0684	MDL	0.552	PQL	mg/Kg	J	E
TIN	2.36	J	1.10	MDL	11.0	PQL	mg/Kg	J	Z
Zirconium	2.05	J	0.927	MDL	5.52	PQL	mg/Kg	J	Z

Sample ID: SL-158-SA5B-SB-4.0-5.0 ***Collected:*** 12/22/2010 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
BORON	3.92	J	0.987	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